

**H.S. Skovoroda Kharkiv National
Pedagogical University**

ISSN 2709-7986 (online)



EDUCATIONAL CHALLENGES

Electronic Scientific Journal

**Volume 27
Issue 2**

**2022
Autumn**



**2022
Kharkiv**

**H.S. Skovoroda Kharkiv National
Pedagogical University**

ISSN 2709-7986 (online)

EDUCATIONAL CHALLENGES

Electronic Scientific Journal

**Volume 27
Issue 2**

**2022
Kharkiv**

EDUCATIONAL CHALLENGES

Electronic Scientific Journal

2022

Volume 27, Issue 2

© H.S. Skovoroda KhNPU, 2022

Key title: Educational Challenges**Frequency:** twice a year (April & October).**ISSN** 2709-7986 (online)**Official website:**<http://educationalchallenges.org.ua/>**Publisher:**

H. S. Skovoroda Kharkiv National Pedagogical University.

Contact e-mail:educationalchallengesjournal@gmail.com**Publisher's Address, Editorial Board's Address:**

Kostikova Ilona, H.S. Skovoroda Kharkiv National Pedagogical University, Alchevskyh Str., 29, Kharkiv, 61002, Ukraine.

All authors have **ORCID.ORG** digital object identifier.All articles have **DOI**.The journal was founded in 1996, the title "Pedahohika ta psykholohiya" = "Pedagogy and Psychology" [**ISSN** 2312-2471 (print), **e-ISSN** 2313-2361].The journal language is **English**.

The journal is an open access journal.

Free of charge for articles' authors.

Archives of previous issues:<http://journals.hnpu.edu.ua/index.php/pedagogy>The edition is included in the **List of Scientific Professional Publications of Ukraine (category B / категория Б)** based on the Order of the Ministry of Education and Science of Ukraine № 1290 dated 30.11.2021 (Annex 3) in the field of educational sciences.

In 2020 the title was changed to "Educational Challenges" (e-ISSN 2709-7986 (online)).

All articles are free for users to access, read, download and print under a **Creative Commons Attribution-NonCommercial 4.0 International License**.

It is recommended for publishing according to the decision of the Scientific Council of H.S. Skovoroda Kharkiv National Pedagogical University (Minutes / Protocol № 7 dated 02 September 2022).

EDITORIAL BOARD**EDITOR-IN-CHIEF:****Ilona
KOSTIKOVA**

Doctor of Science (Education), Ph.D. in Education, Ph.D. in Philology, Full Professor, Head of Department of Theory and Practice of the English Language, H. S. Skovoroda Kharkiv National Pedagogical University, Ukraine.

ORCID ID: 0000-0001-5894-4846;**Web of Science ResearcherID:** M-9580-2018;**Scopus Author ID:** 57207981491.**DEPUTY EDITOR:****Emerson Abraham
JACKSON**

Ph.D. Scholar, Research Scholar, Centre of West African Studies, University of Birmingham, United Kingdom, Research Economist, Bank of Sierra Leone.

ORCID ID: 0000-0002-2802-6152;**Web of Science ResearcherID:** I-2946-2019;**Scopus Author ID:** 57194773644.**EDITORIAL BOARD:****Michail
KALOGIANNAKIS**

Ph.D., Associate Professor, Department of Preschool Education, Faculty of Education, University of Crete, Greece.

ORCID ID: 0000-0002-9124-2245;**Web of Science ResearcherID:** A-1480-2014;**Scopus Author ID:** 8533759300.

**Ana
FRUNZA**

Ph.D., Ethics & Scientifics, Researcher III, Lecturer, LUMEN Research Center in Social and Humanistic Sciences, "Stefan cel Mare" University from Suceava, Faculty of Law & Administrative Sciences, Romania.

ORCID ID: 0000-0002-6198-3130;

Web of Science ResearcherID: AFL-6422-2022;

Scopus Author ID: 55605075300.

**Martin
DJOVČOŠ**

Ph.D., Associate Professor, Department of English and American Studies Faculty of Arts, Matej Bel University, Slovakia.

ORCID ID: 0000-0003-2487-4151;

Web of Science ResearcherID: AAO-7765-2020;

Scopus Author ID: 56624528900.

**Claudia-Neptina
MANEA**

Ph.D., Lecturer, Faculty of Psychology and Educational Sciences, Ovidius University of Constanta, Romania.

ORCID ID: 0000-0003-2528-1286;

Web of Science ResearcherID: AAW-2046-2020;

Scopus Author ID: 57219112187.

**Cleofé
ALVITES-HUAMANI**

Ph.D., Master's in Teaching at the Higher Level; Coordinator of the Doctorate in Education and Researcher recognized by RENACYT-CONCYTEC P0012213; Teacher at the Graduate School at the University of César Vallejo at the Chair of Scientific Research Methodology, Peru.

ORCID ID: 0000-0001-6328-6470;

Web of Science ResearcherID: DVV-6336-2022;

Scopus Author ID: 57218206870.

**Christopher
RUNDLE**

Ph.D., Associate Professor, Department of Interpreting and Translation of the University of Bologna, Italy; Honorary Senior Lecturer in Translation and Italian Studies at the School of Arts, Languages and Cultures of the University of Manchester, United Kingdom.

ORCID ID: 0000-0001-7790-3468;

Web of Science ResearcherID: AAO-5711-2020;

Scopus Author ID: 50861689600.

**Natalie
KONONENKO**

Ph.D., Professor, Kule Chair in Ukrainian Ethnography, Faculty of Arts, Kule Folklore Center, Emerita, University of Alberta, Waterloo, Ontario, Canada.

ORCID ID: 0000-0002-5161-9511;

Web of Science ResearcherID: FHQ-4785-2022;

Scopus Author ID: 35970616200.

**Eduardo
SAGUIER**

Ph.D., Honorable Director of the Instituto de Historia Argentina e Iberoamericana "Emilio Ravignani"; Professor of Argentine History in the Department of History of the School of Philosophy of the University of Buenos Aires, Argentina.

Web of Science ResearcherID: CCQ-1907-2022;

Scopus Author ID: 8150536400.

**Eda
ÜSTÜNEL**

Ph.D. in Applied Linguistics, Full Professor, Department of English Language Teacher Training, Faculty of Education, Head of School of Foreign Languages, Muğla Sıtkı Koçman University, Turkey.

ORCID ID: 0000-0003-2137-1671

Web of Science ResearcherID: DZL-8244-2022.

Scopus Author ID: 55996915300;

**Wojciech J.
CYNARSKI**

Prof. Dr. Hab., Ph.D. in Physical Culture Sciences, Full Professor, Head of the Chair of Social-Humanistic Foundations of Physical Culture, Institute of Physical Culture Studies, University of Rzeszow, Poland.

ORCID ID: 0000-0003-1252-5456;

Web of Science ResearcherID: GBL-7209-2022;

Scopus Author ID: 35329262900.

**Sandro Nuno Ferreira
de SERPA**

Assistant Professor, Faculty of Social and Human Sciences, Department of Sociology, University of the Azores; Interdisciplinary Centre of Social Sciences – CICS.UAc/CICS.NOVA. UAc; Interdisciplinary Centre for Childhood and Adolescence – NICA – UAc, the Azores, Portugal.

ORCID ID: 0000-0003-4286-4440;

Web of Science ResearcherID: T-5007-2017;

Scopus Author ID: 56609059500.

**Dave E.
MARCIAL**

Ph.D. in Education, Associate Professor, Director of the Office of Silliman Online University Learning, Silliman University, Philippines.

ORCID ID: 0000-0003-0006-8841;

Web of Science ResearcherID: FJM-9929-2022;

Scopus Author ID: 36613313500.

**Manoj
DEVARE**

Ph.D. in Computer Science, Full Professor, Head of Institute Amity Institute of Information Technology, Amity University Mumbai, India.

ORCID ID: 0000-0002-9530-3914;

Web of Science ResearcherID: H-2442-2016;

Scopus Author ID: 49963326200.

**Despina
SIVEVSKA**

Ph.D. in Education, Associate Professor, Department of Pedagogy, Faculty of Educational Sciences, Goce Delcev University Stip, North Macedonia.

ORCID ID: 0000-0003-3557-8059;

Web of Science ResearcherID: DSQ-3182-2022;

Scopus Author ID: 36544307300.

**Fahriye
ALTINAY**

Professor in Educational Technology, Head of Department of Computer Education and Instructional Technology, Near East University, Nicosia, Cyprus.

ORCID ID: 0000-0002-8452-5992;

Web of Science ResearcherID: J-7411-2016;

Scopus Author ID: 8350821700.

**André Luís
SPECHT**

Ph.D. in Language Studies, Professor, Universidade Estadual do Centro-Oeste (UNICENTRO), Irati, Paraná, Brazil.

ORCID ID: 0000-0001-9659-7793;

Web of Science ResearcherID: AFF-8392-2022;

Scopus Author ID: 57194551069.

**Danilo
ROGAYAN**

College Research Coordinator, College of Teacher Education, President Ramon Magsaysay State University, San Marcelino, Philippines.

ORCID ID: 0000-0002-8597-7202;

Web of Science ResearcherID: ABE-9312-2020;

Scopus Author ID: 57210125320.

- Fatjona KAMBERI** Ph.D., Associate Professor, Faculty of Public Health Research Centre, University of Vlora, Vlora, Albania.
ORCID ID: 0000-0003-4793-9384;
Web of Science ResearcherID: A-3224-2019;
Scopus Author ID: 57113659600.
- Fernando DÍEZ ESTELLA** Doctor of Science, Full Professor, Centro Universitario Villanueva, Director of the University Master's Degree for Access to the Legal Profession, Spain.
ORCID ID: 0000-0002-5011-0051;
Web of Science ResearcherID: AAA-8671-2019;
Scopus Author ID: 56111295800.
- Mohamad Ahmad Saleem KHASAWNEH** Assistant Professor, Special Education Department, King Khalid University, Saudi Arabia.
ORCID ID: 0000-0002-1390-3765;
Web of Science ResearcherID: AAU-7001-2020;
Scopus Author ID: 57219400813.
- Liudmyla HOLUBNYCHA** Doctor of Science (Education), Ph.D. in Education, Full Professor, Department of Foreign Languages #3, Yaroslav Mudryi National Law University, Ukraine.
ORCID ID: 0000-0002-8252-9893;
Web of Science Researcher ID: M-9616-2018;
Scopus Author ID: 57207980246.
- Alla OLKHOVSKA** Doctor of Science (Education), Ph.D. in Education, Associate Professor, Mykola Lukash Translation Studies Department, V.N. Karazin Kharkiv National University, Ukraine.
ORCID ID: 0000-0001-9034-4170;
Web of Science ResearcherID: AAN-7774-2020.
- Ivan BAKHOV** Doctor of Science (Education), Ph.D. in Education, Full Professor, Head of the Department of Foreign Philology and Translation, Interregional Academy of Personnel Management, Kyiv, Ukraine.
ORCID ID: 0000-0002-8379-199X;
Web of Science ResearcherID: O-3325-2017;
Scopus Author ID: 55858989400.
- Tetiana FOMENKO** Ph.D. in Education, Associate Professor, Department of Foreign Languages, Sumy National Agrarian University, Ukraine.
ORCID ID: 0000-0002-3048-7097;
Web of Science ResearcherID: V-4642-2018.
- Oleh KOMAR** Doctor of Science (Education), Ph.D. in Education, Ph.D. in Philology, Associate Professor, Department of English and Methods of its Teaching, Pavlo Tychyna Uman State Pedagogical University, Ukraine.
ORCID ID: 0000-0001-8071-3905;
Web of Science ResearcherID: AAR-8288-2020;
Scopus Author ID: 57212880351.

TABLE OF CONTENTS**EDUCATIONAL CHALLENGES**

Electronic Scientific Journal

Volume 27 • Issue 2 • 2022**FROM THE EDITOR:****Ilona KOSTIKOVA***To the Authors, Researchers, Colleagues, Readers, Friends!!* 8-15**THE EDITOR'S GUEST:****Haozhe JIANG***Teaching English to Young Learners in China and Ukraine*..... 16-28**ARTICLES:****Marina BILOTSEKOVETS, & Tatiana FOMENKO***Learning English Grammar by Means of M-Learning: A Case Study*..... 29-38**Yaroslav CHERNIONKOV***Individualization of Future Foreign Languages Teacher's Professional Training in Distance Education Conditions*.....39-53**Liudmyla HOLUBNYCHA, Tetiana SHCHOKINA, Natalia SOROKA, & Tetiana BESARAB***Development of Competency-Based Approach to Education*..... 54-65**Iryna HONTARENKO***Students' Independent Work in Studying Foreign Language based on LMS MOODLE*..... 66-78**Nataliia HRONA, Olena VYSHNYK, & Iryna PINCHUK***Soft Skills Development in Future Primary School Teacher's Training*..... 79-90**Ilona KOSTIKOVA, & Svitlana MIASOIEDOVA***E-Learning Teaching: Supportive Online Course 'English Fastpass'*..... 91-104**Irina LEBEDEVA, Larisa NORIK, & Stepan LEBEDEV***Digital Resources as a Way to Increase the Motivation of Economic Specialties Students in Studies of Mathematics*..... 105-121**Iryna MAISTRIUK, & Nataliia PONOMAROVA***Concept Content and Structure of Self-Educational Competence of School Students in the Modern Educational Space*..... 122-137**Viktor NAGAYEV, & Tetiana GERLIAND***The Technological Basis of Training Future Teachers of Agricultural Disciplines in Higher Education Institutions: Pedagogical Experience of Great Britain*138-150

Yaroslav OPANASENKO, & Viktoriia NOVIKOVA*Distance Learning in Higher Education: The Experience of the Covid-19**Pandemic and War in Ukraine*..... 151-168**Oksana REZVAN, & Alla KROKHMAL***Peculiarities of Pedagogical Internship Organization for Future**Specialists of Foreign Philology in Blended Learning*..... 169-184**Tetiana SOBCHENKO, & Viktoriia VOROZHBIT-HORBATIUK***Results of Digital Competence Development for Philology Students**within Blended Learning* 185-198**Iryna TRUBAVINA, Oleksandr CHEREDNYCHENKO,****Nadiia OLIINYK, & Kirill NEDRIA***Justification of the Educators' New Professional Functions under**the Conditions of Martial Law* 199-215**Nataliia TUCHYNA, & Ihor KAMYNIN***Developing Research Competence of Pre-Service EFL Teachers* 216-227**Nataliia YEVTUSHENKO, Natalia TVERDOKHLIEBOVA,
& Iryna MEZENTSEVA***Ensuring Psychological Safety to Develop Students' Risk-Based**Thinking of the Specialty "Civil Security"* 228-241

From the Editor-in-Chief**TO THE AUTHORS, RESEARCHERS, COLLEAGUES,
READERS, FRIENDS!****Ilona KOSTIKOVA**

Doctor of Sciences in Education, Ph.D. in Education, Ph.D. in Philology, Full Professor, Head of the Department of Theory and Practice of the English Language, H.S. Skovoroda Kharkiv National Pedagogical University, 29, Alchevskyh Street, Kharkiv, Ukraine.

✉ **E-Mail:** ilonakostikova@gmail.com

 <https://orcid.org/0000-0001-5894-4846>

**DEAR AUTHORS, RESEARCHERS, COLLEAGUES,
READERS, FRIENDS!**

The Russian-Ukrainian war has been lasting for 7 months since **February 24, 2022**. I'm still in Kharkiv, helping my city, university, students, colleagues, old and sick people who stayed in the city. My house and apartment are not ruined, fortunately.

For the first war days everything stopped because of bombing and shelling: shops, banks, transport, schools and universities. For several days there were no light, water, Internet. But we did not surrender and capitulate, and the life went on in March. After first war weeks everything began to come alive and everybody learnt to survive and live in the war. Later, in April the schools and universities started online education, transport began to work, Kharkiv underground started. The spring came. We began to collect the journal articles, in some of them you can see the war reflections.

Many people helped Ukraine, Ukrainian people, thanks them. About 7 million Ukrainians were internally displaced, nearly 7 million have fled as refugees. But many Ukrainian scholars, for private, civil, legal,

© Ilona KOSTIKOVA, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

professional reasons decided not to leave the country, even in wartime. The journal foreign editorial members, scholars helped us a lot.

André Luís Specht, Professor, Mid-West State University, Brazil, donated to our Ukrainian department University students and helped 15 orphan-students, he helped to the ruined department. *Zhanna Tzeinman*, Professor, Davidson Institute of Science Education at the Weizmann Institute of Science, Israel, donated to the University colleagues' help and military plate carriers that saved the lives. *Supporting Ukrainian Editorial Staff (SUES) Group, France, Rémy Ienco*, in his person, provided the journal with a scholarship to go on publishing issues.

Since February 24, 2022, Kharkiv has been mercilessly and brutally shelling; numerous buildings, universities, schools, cultural monuments have been damaged or destroyed totally. It happened in summer with one of the University buildings too. Unfortunately, my Department and my Faculty were heavily damaged. Despite heavy strikes, shelling and battles, we blocked off and closed the building windows. The autumn came, but the war still goes on. However, I know and have no doubt the light will conquer the darkness. We'll do everything to bring the Ukrainian victory closer. Glory to Ukraine!

THANK YOU!

01.10.2022

H.S. SKOVORODA KHARKIV NATIONAL PEDAGOGICAL UNIVERSITY (Kharkiv, Ukraine)

BEFORE the 24th February 2022...



² KhNPU imeni H.S. Skovorody, (2020, May 24). *Vesna v pedahohichnomu* [Photo album]. Facebook. Retrieved October 1, 2022, from <https://www.facebook.com/media/set/?set=oa.3268363653228658&type=3>

AFTER the 24th February 2022...





AUTUMN IN KHARKIV, UKRAINE (2022)







<https://doi.org/10.34142/2709-7986.2022.27.2.01>

TEACHING ENGLISH TO YOUNG LEARNERS IN CHINA AND UKRAINE

Received: 15/06/2022

Accepted: 17/07/2022

Haozhe JIANG



University Teacher, Nanjing University, People's Republic of China; Ph.D. Student, H. S. Skovoroda Kharkiv National Pedagogical University, Ukraine.

✉ E-Mail: 591099861@qq.com

 <https://orcid.org/0000-0002-9300-892X>

ABSTRACT

The research need is determined by active educational partnership between People's Republic of China and other countries, and Ukraine too. The collaboration promotes the comparative pedagogical researches of educational process of both countries.

The content of the Recommendations of the European Council, the recommendations of the British Council on language education demand new requirements for the language quality teaching and learning, the development of new forms, methods and tools in the world. In this regard, it is important to study the principles of teaching English in China and Ukraine.

*The **purpose** is to outline the basics of teaching English at school in China and Ukraine.*

***Methodology.** The analytical method is used to investigate English teaching process; the comparative method is used to analyze the experience of teaching English in two countries.*

***Results.** Teaching English in China as the new reality shows that the National Curriculum has made English a compulsory subject for Chinese schools. The teaching method in China differs greatly from the international, Western one. It is based on information memorization, as well as it is focused on the study of the Chinese language, culture, and history.*

Only in international or private schools in China, teaching is conducted according to international standards. To learn English, the British or

© Haozhe JIANG, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

American model of learning is used, based on communication and discussing learning material and new information, and not on copying or memorizing it. According to the new Curriculum, for young learners, English is taught as a subject two or three hours a week in 1-3 grades, three or four hours a week in 4-6 grades. International English curricula focus on communication and skills, but the Ministry of Education of the People's Republic of China has decided to expand its goals to national ones and adapt the international English curriculum for Chinese young learners.

Experience of teaching English in Ukraine shows that English is studied from the 1st grade, from the age of 6, according to the "New Ukrainian School" curriculum. The British Council in Ukraine took care of teaching English to young learners greatly. It trains a lot of English teachers in Ukraine. Teaching English to young learners has moved very much in providing the communicative approach. At English lessons children learn English by communication using pictures, songs, poems, fairy tales, short plays, games and holidays.

Conclusion. China becomes the world leader in the number of English learners as it is necessary for schools, Universities, and future careers. Now about 400 million Chinese learn English, there are more English learners in China than English speakers. The English teaching method is mostly old school, and traditional, but the situation is changing. Most Chinese consider that English is a necessary means of bringing China closer to the whole world. Ukrainian teachers and learners are more trained for the new requirements to teach and learn English due to the British Council's help in Ukraine. The communicative approach is basically used for teaching English. Ukrainian teachers and learners have got a definite positive experience to teach and learn English successfully.

KEYWORDS: Teaching, Learning, English, China, Ukraine, Young Learner.

INTRODUCTION

The research need is determined by active educational partnership between People's Republic of China and other countries, and Ukraine too. The collaboration promotes the comparative pedagogical researches of educational process of both countries.

The content of the Recommendations of the European Council, the recommendations of the British Council on language education demand new requirements for the language quality teaching and learning, the development of new forms, methods and tools in the world. In this regard, it is important to

study the principles of teaching English in China and Ukraine.

In general, English education in China has always been valued. The education system in China is divided into primary school (six years), junior high school (three years) and senior high school (three years), which means that Chinese learners generally have to go through 12 years of study before passing the college entrance examination to enter a university.

During twelve years of learning, English is very important. Now, most primary schools start to teach English from the first year, and the last one is not higher than the third grade, and even some

preschool children learn English before they enter primary school.

In junior and senior high schools, English is one of the most important subjects. Good command of the English language is a crucial factor in college admission decisions. In some universities in China applicants are required to pass the College English Proficiency Test (CET4) in order to get a degree certificate, which also makes it necessary for most students to keep learning English during their college years.

In China's postgraduate entrance examination, English has become the most influential subject, and students' English scores directly determine the final result. Therefore, in China, the importance of English is obvious. Students must learn English all the time, it makes English more and more popular in China.

In Ukraine teaching English has become very popular for the last 20 years. English is extremely important in Ukraine.

Firstly, the purpose of teaching English is communication, as it must be, the development of active skills and their practical use, not an assessment for the studied topic.

Secondly, a teacher's friendly attitude, not the authoritarian work style.

Thirdly, games as a practice, a dynamic change of learners' attention, because learning English should be interesting, easy, and only in such a way it is effective in Ukraine.

The purpose is to outline the basics of teaching English at school in China and Ukraine.

METHODOLOGY

The analytical method is used to investigate English teaching process; the comparative method is used to analyze

the experience of teaching English in two countries.

RESULTS

Teaching English in China as the New Reality

So, let's analyze primary English education. The National Curriculum in China since 2001 has made English a compulsory subject for Chinese elementary schools (Kaduhr, & Fujisawa, 2009).

The National Curriculum was adopted a bit in 2011 (Gil, & Adamson, 2011). As a rule, English is studied in schools from the 2nd grade, from the age of 7, less often from the 4th grade, from the age of 9 (Wang, 2007).

In junior and senior high schools, English continues to be studied in China, it is included in the National Curriculum as the main subject.

Further to obtain a diploma of graduation from a college or University, an English language exam is required. All applicants to graduate school must pass an English language exam too. The level of English proficiency also affects career development in China, being one of the necessary demands (Meredith, 2022). So, let's analyze teaching in China schools in general.

As it is known, primary school in China is the first stage of compulsory education. Children study from the age of six from 1 to 6 grades. About 60% of the time is devoted to the main subjects as Chinese, Mathematics, then they teach English, Natural Science, Art, Music, Natural History and Geography. Practical classes begin from the 4th grade, learners work in workshops or on farms.

Chinese schools, in comparison with the Ukrainian ones, have more lessons, classwork and homework activities. The

teaching method in China differs greatly from the international Western (Ukrainian) one. It is based on information memorization, as well as it is focused on the study of the Chinese language, culture, and history.

Only in international or private schools in China, teaching is conducted according to international standards (Pettit, 2016). To learn English, the British or American model of learning is used, based on communication and discussing learning material and new information, and not on copying or memorizing it.

The peculiarity of Chinese lessons for young learners at schools is their early start, around 8 o'clock in the morning. In the first half of the day, there are four or five lessons, in the second there are three or four. In addition, China's elementary school has a physical training break, a lunch break, and a break for sleep.

The schedule for young learners is strictly structured. A certain time is agreed for doing homework at school after lessons. While doing homework at school, teachers monitor young learners carefully.

Only after completing homework, young learners can start reading fiction or other activities that are not related to the basic program, but they must remain in the classroom until the end of free time.

In China, all schools, unlike in Ukraine, have their own fenced area (campus) with an open sports ground, an indoor stadium for physical training, a gym and a swimming pool, and equipped classrooms for playing musical instruments.

In addition, there are clubs on campus aimed at the development of various abilities for young learners: from drawing to a drama club. Time for classes in

additional clubs is also taken into account in the schedule for young learners.

Thus, young learners from the 1st grade develop the discipline routine, it is also added by wearing the same uniform for everyone. And it is forbidden to use gadgets during classes and do homework at school. Even during the 15-minute break between lessons, it is forbidden to take out all smartphones or tablets, it is strongly recommended to leave them in the classroom.

In high school, schools strictly monitor the students' behaviour and their safety; it is almost impossible for a stranger to enter the school campus. On campus smoking, drinking alcohol or taking drugs are also prohibited in high school.

A discipline order in high school is strictly controlled, and with systematic rule violations students can be expelled. Though, students in high school usually set career goals, so, they need English very much (Gamlam, 2019).

Especially in some provinces in China that are closely connected with international trade, such as Shanghai, English is needed strongly (Qi, 2016). In the curriculum for Shanghai schools, it is indicated that young learners from 3 to 5 grades take a test at the semester end, although this is not an exam yet.

Thus, on the one hand, English is encouraged to learn, but not imposed (Yang, 2016). On the other hand, the Chinese Ministry of Education, in my view, may be concerned that the younger generation of Chinese, knowing English, can get any international information that has not been processed by Chinese censors and it may differ from the official Chinese ideology.

The Chinese People's Press, in collaboration with English publishing house Pearson, has written and published

two new series of English textbooks for Chinese learners.

Before using these textbooks, they underwent many tests and were eventually recommended for teaching and learning in China. According to these textbooks, learners from 25 provinces and cities of self-government are taught. Textbook series have been used in approximately 70% of primary and secondary schools across China.

That's why, for example, in 2021, English authentic textbooks disappeared from sale in the bookstores in Shanghai because they were not officially approved to be used by the Ministry of Education. So, it has become very difficult to find authentic English language textbooks for Chinese children. It is also very difficult to find it in online bookstores.

Most English textbooks are written or adopted by Chinese authors. The Chinese Ministry of Education does not allow the use of textbooks in schools written only by foreign authors. It is believed that foreign authors do not know the needs of Chinese children. In each textbook, along with the English word, an explanation is written in Chinese. According to the new Curriculum, for young learners, English is taught as a subject from two to three hours a week in 1-3 grades, three or four hours a week in 4-6 grades.

The main purpose of teaching English in a primary school as it is known from international experience is to develop young learners' communication and skills (Ren, 2017); to use English in everyday life and for further study. International English curricula focus on communication and skills (Li, 2019), but the Chinese Ministry of Education has decided to expand its goals and adapt the international English curriculum for Chinese young learners.

To achieve the best result in English teaching for young learners, the Ministry of Education in China has allowed the use of satellite television at lessons for educational purposes. Video can be used at lessons for no more than 25 minutes. In China, there is a separate channel where special educational cartoons and programs are demonstrated. Teachers of English can use the channel at lessons if the topics match the curriculum.

Unfortunately, classes for English lessons in public schools in cities and towns are not divided into groups. About 40 learners are taught English together (Gao, 2016). That's why in primary school in China, class work in the classroom predominates (Liu, 2011). In modern well-equipped schools any multimedia can be used, and information and communication technologies too (Bo, 2013). Such teaching means and tools are used in primary schools in large cities mostly.

Experience of Teaching English in Ukraine

In Ukraine, English is studied (Methods, 2013) from the 1st grade, from the age of 6 according to the "New Ukrainian School" curriculum (State Standard, 2019). In 2017-2019, the Ministry of Education and Science of Ukraine together with international and national partners implemented a number of interrelated projects aimed at face-to-face and distance training teachers of 100 pilot Ukrainian schools to teach English to young learners in a new context.

The British Council in Ukraine took care of English teachers. 164 teachers of pilot schools and 25 methodologists of postgraduate pedagogical education took part in the training events with a total duration of 88 hours and received certificates.

Also, 17 master-trainers and 120 teachers-agents of change were trained, who then trained more than 17 thousand English teachers in Ukraine who started teaching first-graders in the 2018-2019 school year. So, teaching English has got effective preparation.

“New Ukrainian School” is a curriculum aimed at young learners’ development (Typical educational programs, n.d.; Savchenko, n.d.). It is necessary at English lessons to change the types of activities: young learners should not sit still at the desks for at least 10-15 minutes, they should move (Redko, 2018).

Therefore, it is important to change lesson activities (Makar, Derkach, 2020).

Young learners remember English better if it is presented in games, songs, rhymes, or storytelling. At English lessons, it is necessary to use poems, fairy tales, short plays, games using English songs and poems (Kavaler, n.d.).

It is a great pleasure for young learners to recite poems. Young learners willingly make their own "Little dictionary books with pictures" for new English words on the topic. Using their own pictures, young learners retell, describe objects, and share emotions.

At English lessons, young learners really should move a lot: during physical activity with English rhymes young learners repeat and remember new English words. The combination of movements and pronunciation helps them to learn English very much (Dudyk, & Zevchenko, 2017).

Last few years, with the help of the British Council in Ukraine, teaching English to young learners has moved a lot in providing a communicative approach. It differs from previous English teaching in primary schools (Bernatska, & Komogorova, 2019).

Let’s revise the basics of a communicative approach to teaching English:

- active pair and group work, communication first of all;
- use of visibility, authentic materials (Kostikova et al, 2020), digital tools (Komar, 2020; Kostikova et al, 2019; Kostikova et al, 2021; Shevchuk, 2021);
- achieving the expected results, feedback, and reflection.

Let’s analyze the basics of English lesson organization for young learners in the first grade in Ukraine. Some pieces of advice are the following. Any lesson should be communicative. A lesson lasts 35 minutes. Children's attention is short-lived, so it is necessary to change the activities in the classroom every 5-7 minutes.

Children are energetic and need constant movement. Regularly it is necessary to change outdoor games for quiet classroom activities. It is necessary to create positive motivation to learn English. Show children that you work with them with joy and pleasure that you are confident and sure of their success. In such a way children will also work with joy and pleasure.

It is needed to develop a lesson routine. Develop communicative skills using active, diverse activities. However, you can use one game at several lessons, and children like it. Vary pair, group, and individual activities (Voloshina, 2018).

A teacher keeps in touch with the class and each young learner during a lesson, using physical activities, songs, poems, movements, so-called body language, and emotional language (speak loudly or softly, in different tones). Give each young learner the opportunity to take an active part at a lesson.

As we know children learn about the environment by touch. Allow them to

touch toys, flashcards, and pictures, as well as to draw, create something themselves.

You can use a puppet show or a mask. Sometimes for shy children it is often difficult to talk before other children, but they can speak under a mask. It is very important to evaluate young learners verbally and only positively.

It is recommended not to teach more than four or five new words at a lesson. Let's remember that the aim of teaching English is communication, so particular attention should be paid to speaking and listening, developing communicative skills. Encourage young learners to communicate as much as possible in English, even at the beginner level.

And finally, pair or group activities in the classroom should be as simple as possible, so that children can understand them. It is necessary to give clear and simple instructions so that children understand what is expected of them. Use shorter activities as children's attention and concentration are short-lived. And children usually lose interest in the activity if it is too long and difficult.

DISCUSSION

As for the discussion, on the one hand, English education in Ukraine is more in line with international standards. At the same time, the classroom is more interesting and diversified. It pays more attention to children's learning through games, makes them move in class, gives full play to their subjective initiative, and strives to improve learners' comprehensive English ability.

On the other hand, China's English class is strict, the learners should under the requirements of a teacher to complete the class assignments and homework, although they lack interest.

But in China's English class, the learners can master the English words more quickly, and can also learn English grammar faster by concentrated reading and practice that the learners can quickly and skillfully master the knowledge of each lesson unit.

Although English classes in some parts of China are not in line with international standards and lack interest, it is the best way under the current national conditions of China. Because of the large population in China, the current way is the most reasonable to popularize English education in a more comprehensive way.

CONCLUSION

So, to conclude, China will become the world leader in the number of English learners as it is necessary for schools, universities, careers. Now about 400 million Chinese learn English, there are more English learners in China than English speakers.

The English teaching method is mostly old school, but the situation has changed. Most Chinese insist that English is a necessary means of bringing China closer to the whole world.

Ukrainian teachers and learners are more trained for the new requirements to teach and learn English due to the British Council in Ukraine. The communicative approach is basically used. Ukrainian teachers and learners have got the definite experience to teach and learn English successfully.

So, both countries should learn from each other and build a better English teaching system.

Figure 1.*At English lessons in China*

(<https://silkroadnews.org/upload/iblock/7f2/7f2f43417def47f8f6ef768ada2eb86c.jpg>)

Figure 2.*At English lessons in Ukraine*

(<https://i.ytimg.com/vi/xIH6Okv23XY/maxresdefault.jpg>)

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Bernatska O. V., & Komohorova M.I. (2019). Sutnist inshomovnoi komunikatyvnoi kompetentnosti uchniv pochatkovoï shkoly ta stratehii yii formuvannia [The Essence of Foreign Language Communicative Competence of Elementary School Students and the Strategy of Its Formation]. *Naukovi zapysky. Pedahohika*, 143, 22-29. <https://doi.org/10.31392/NZ-npu-143.2019.03> [in Ukrainian].
- Bo, H. (2013). 英语教学中的又一份色彩 – 浅谈多媒体教学手段的有效辅助 [Another Color in English Teaching – On the Effective Aid of Multimedia Teaching Methods]. *教育 [Education]*, 33 [in Chinese].
- Dudyk, N., & Zevchenko, T. (2017). Osoblyvosti formuvannia inshomovnoi komunikatyvnoi kompetentnosti v uchniv pochatkovoï zahalnoosvitnoi shkoly [Peculiarities of Foreign Language Communicative Competence Development for Primary Schoolchildren]. *Psykhologo-pedahohichni problemy silskoi shkoly*, 57, 60-66. https://library.udpu.edu.ua/library_files/psuh_pedagog_probl_silsk_shkolu/57/9.pdf [in Ukrainian].
- Gamlam, R. (2019, April 10). *The Ultimate Guide to Teaching English in China*. Go Overseas. <https://www.gooverseas.com/blog/guide-teaching-english-china>
- Gao, L. (2016). 基于教育游戏创新培训模式 — 教师高阶思维能力提升的设想探索 [Innovative Training Model Based on Educational Games: Assumptions and Explorations of Improving Teachers' Higher-order Thinking Ability]. *科技创新导报 [Science and Technology Innovation Herald]*, 13(10), 139-140 [in].
- Gil, J. & Adamson, B. (2011). Chapter 2. The English Language in Mainland China: A Sociolinguistic Profile. In A. Feng (Ed.), *English Language Education Across Greater China* (pp. 23-45). Bristol, Blue Ridge Summit: Multilingual Matters. <https://doi.org/10.21832/9781847693518-004>
- Kaduhr, D., & Fujisawa, Y. (2009). Observations on English Education in Elementary Schools in China. *大阪樟蔭女子大学論集 [Journal of Osaka Shoin Women's University]*, 46, 29-38. <https://core.ac.uk/download/pdf/229392358.pdf> [in Chinese].
- Kavaler, N. (2015) Formuvannia inshomovnoi komunikatyvnoi kompetentsii molodshykh shkoliariv interaktyvnymy metodamy [Foreign Language Communicative Competence Development of Young Learners by Interactive Methods]. *Nauka. Osvita. Molod [Science. Education. Young]*, n.d., 131-133. https://library.udpu.edu.ua/library_files/stud_konferenzia/2015_1/47.pdf [in Ukrainian].
- Komar, O. (2020). European Experience of the Use of Information and Communication Technologies in Initial Education of the English Language Teachers. *Educational Challenges*, 25(1), 55–67. <https://doi.org/10.34142/2709-7986.2020.25.1.05>
- Kostikova I., Gulich, O., Holubnycha, L., & Besarab, T. (2019). Interactive Whiteboard Use at English Lessons: from University Students to Young learners. *Revista Espacios*, 40(12), n.d. <http://www.revistaespacios.com/a19v40n12/a19v40n12p10.pdf>

- Kostikova, I., Chastnyk, O., Ptushka, A., Yazlovytska, O., & Dovzhenko, O. (2021). Digital technology implementation in students' proficiency development for English listening. *Amazonia Investiga*, 10(48), 34-42. <https://doi.org/10.34069/AI/2021.48.12.4>
- Kostikova, I., Honcharova O., Vorozhbit-Horbatiuk V., Soloshenko-Zadniprovska, N., Marmaza, O., & Lushchik, Y. (2020). The Impact of Summer Reading on Young Learners' Foreign Language Acquisition. *Journal of Educational and Social Research*, 10(2), 5-14. <https://doi.org/10.36941/jesr-2020-0022>
- Li, R. (2019). 音乐化教学手段的应用研究李 (甘肃省酒泉市肃州区泉湖学区四坝小学, 甘肃酒泉) [Research on the Application of Musical Teaching Methods (Siba Primary School, Quanhu School District, Suzhou District, Jiuquan City, Gansu Province, Jiuquan, Gansu (735000)]. *学周刊* [Academic Weekly], 29, n.d. https://www.fuyoutech.club/web/mag_article/70757/1001777726 [in Chinese].
- Liu, Y. (2011). *幼儿园英语游戏教学研究* [Research on English game teaching in kindergartens]. Hebei: Hebei University [in Chinese].
- Makar, L.M, & Derkach, Yu.Ya. (2020). Ihrovi formy roboty yak zasib formuvannia inshomovnoi komunikatyvnoi kompetentnosti shkoliariv [Games as a means of foreign language communicative competence development for young learners]. *Young Scientist*, 9(85), 209-213. <https://doi.org/10.32839/2304-5809/2020-9-85-45> [in Ukrainian].
- Meredith, A. (2022, March 27). *Teach English in China: The Ultimate Step-by-Step Guide*. *Teach English in China*. CLI. <https://studycli.org/teach-english-in-china/ultimate-guide/>
- Nikolaeva, S. Yu. (Ed.). (2013). *Metodyka navchannia inozemnykh mov i kultur: teoriia i praktyka: pidruchnyk dlia stud. klasychnykh, pedahohichnykh i linhvistychnykh universytetiv* [Methods of teaching foreign languages and cultures: theory and practice: a textbook for students from classical, pedagogical and linguistic universities]. Lenvit. <https://kmaecm.edu.ua/wp-content/uploads/2021/06/bigych-o.-b.-borysko-n.-f.-boreczka-g.-e.-ta-in.-2013-metodyka-navchannya-inozemnyh-mov-i-kultur-teoriya-i-praktyka.pdf> [in Ukrainian].
- Pettit, L. (2016, May 6). *The Truth About Teaching at a Chinese Primary School*. *Teach English in China*. <https://teach-english-in-china.co.uk/the-truth-about-teaching-at-a-chinese-primary-school/>
- Qi, G.Y. (2016). The importance of English in primary school education in China: perceptions of students. *Multilingual Education*, 6, 1-18. <https://doi.org/10.1186/s13616-016-0026-0>
- Redko, V.G. (2018). Zasoby formuvannia inshomovnoi komunikatyvnoi kompetentnosti uchniv pochatkovoï shkoly: rezultaty empyrychnykh doslidzhen [Means of development of foreign language communicative competence with young learners: results of empirical research]. *Problemy suchasnoho pidruchnyka* [Problems of the modern textbook], 20, 360-372 [in Ukrainian]. https://lib.iitta.gov.ua/711263/1/Redko_Zasib_Communicative_Competence.pdf
- Ren, L. (2017). 聆听歌声感知语言——小学英语教学中歌曲教学法的应用 [Listening to Singing and Perceiving Language: The Application of Song Teaching Method in Primary

School English Teaching. *Students (Theory Edition)* [学子 (理论版)], 5, n.d. [in Chinese].

Savchenko, O. Ya. *A Typical Educational Program for 3-4 Grades of 'NUS'*. Ministry of Education and Science of Ukraine. [in Ukrainian]. <https://mon.gov.ua/storage/app/media/zagalna%20serednya/programy-1-4-klas/2020/11/20/Savchenko.pdf>

Shevchuk, A. (2021). The Peculiarities of Teaching Foreign Languages by Means of Information and Communication Technologies. *Educational Challenges*, 26(1), 102-111. <https://doi.org/10.34142/2709-7986.2021.26.1.09>

Derzhavnyi standart pochatkovoї osvity. 24 lypnia 2019 r. [State Standard of primary education]. (2019). <https://zakon.rada.gov.ua/laws/show/688-2019-%D0%BF#Text> [in Ukrainian].

Typovi osvitni prohramy dlia 1-2 klasiv NUSh [Typical educational programs for 1-2 grades of "NUS"]. (2019). <https://mon.gov.ua/storage/app/media/zagalna%20serednya/programy-1-4klas/2019/11/1-2-dodatki.pdf> [in Ukrainian].

Voloshyna, O. (2018). Otsiniuvannia inshomovnoi kompetentnosti molodshykh shkoliariv iz zastosuvanniam testovykh tekhnolohii [Assessment of foreign language competence of young learners with the test technology use]. *Naukovyi zbirnyk «Aktualni pytannia humanitarnykh nauk: mizhvuzivskyi zbirnyk naukovykh prats molodykh vchenykh Drohobytskoho derzhavnoho pedahohichnoho universytetu imeni Ivana Franka»* [Scientific Collection "Current Issues" of the humanities: interuniversity collection of scientific works of young scientists of Drohobych Ivan Franko State Pedagogical University], 1(20), 111-115. <https://doi.org/10.24919/2308-4863.1/20.167390> [in Ukrainian].

Wang, Q. (2007). The National Curriculum Changes and Their Effects on English Language Teaching in the People's Republic of China. In J. Cummins, C. Davison, (Eds.), *International Handbook of English Language Teaching* (pp. 87-88). Springer International Handbooks of Education, 15. Springer, Boston, MA. https://doi.org/10.1007/978-0-387-46301-8_8

Yang, R. (2016). Teaching English to Primary School Students in the People's Republic of China. *Global English and Primary Schools*, n.d., 73-94. https://www.researchgate.net/publication/303897402_Teaching_English_to_Primary_School_Students_in_China

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

**ВИКЛАДАННЯ АНГЛІЙСЬКОЇ МОВИ МОЛОДШИМ ШКОЛЯРАМ У
КИТАЇ ТА УКРАЇНІ**

Необхідність дослідження визначається активним освітнім партнерством між Китайською Народною Республікою та іншими країнами, а особливо, Україною. Спільна співпраця сприяє порівняльно-педагогічним дослідженням освітнього процесу обох країн.

Зміст Рекомендацій Європейської Ради, рекомендацій Британської Ради щодо мовної освіти потребують нових вимог до якісного викладання та вивчення англійської мови, розробки нових освітніх форм, методів та засобів. У зв'язку з цим важливим є вивчення засад викладання англійської мови в Китаї та Україні.

Мета – окреслити основи викладання англійської мови в школі Китаю та України.

Методологія. Аналітичний метод використовується для дослідження процесу навчання англійської мови; порівняльний метод використовується для аналізу досвіду викладання англійської мови у двох країнах.

Результати. Викладання англійської мови в Китаї як нова реальність показує, що національна навчальна програма зробила англійську мову обов'язковим предметом для китайських шкіл. Методика навчання в Китаї значно відрізняється від міжнародної, західної. Вона заснована на запам'ятовуванні інформації, а також школа здебільшого орієнтована на вивчення китайської мови, культури, історії.

Тільки в міжнародних або приватних школах Китаю навчання англійської мови ведеться за міжнародними стандартами. Міжнародні навчальні програми з англійської мови зосереджені на спілкуванні та комунікативних навичках. Для вивчення англійської мови в таких школах використовується британська або американська модель навчання, заснована на спілкуванні та обговоренні навчального матеріалу та нової інформації, а не на заучуванні. Згідно з новим навчальним планом у Китаї для молодших школярів англійська мова викладається як предмет дві-три години на тиждень у 1-3 класах, тричотири години на тиждень у 4-6 класах. Проте, китайський уряд вирішив адаптувати міжнародний навчальний план з англійської мови для китайських школярів, доповнивши його національними цілями.

Досвід викладання англійської мови в Україні показує, що англійська мова вивчається з 1 класу, з 6 років, за програмою «Нова українська школа». Британська Рада в Україні доклала багато зусиль для навчання англійської мови. Вона проводила в Україні системну перепідготовку вчителів англійської мови. Викладання англійської мови для молодших школярів значно змінилося на краще для забезпечення комунікативного підходу. На уроках англійської мови школярі вивчають її через спілкування, за допомогою малюнків, пісень, віршів, казок, коротких п'єс, через ігри та свята.

Висновок. Китай стає світовим лідером за кількістю охочих вивчати англійську мову, оскільки мова необхідна для шкіл, університетів, подальшої кар'єри. Зараз близько 400 мільйонів китайців вивчають англійську мову, у Китаї більше тих, хто вивчає англійську, ніж англословних носіїв. Метод викладання англійської мови переважно традиційний, але ситуація змінюється. Більшість китайців вважають, що англійська мова є необхідним засобом для наближення Китаю до

всього світу. Українські вчителі та учні більш підготовлені до нових вимог викладання та вивчення англійської мови завдяки сприянню Британської Ради в Україні. Основним підходом у навчанні є комунікативний. Українські вчителі та учні вже мають певний позитивний досвід для успішного викладання та вивчення англійської мови.

КЛЮЧОВІ СЛОВА: викладання, навчання, англійська мова, Китай, Україна, школяр.

CITE THIS ARTICLE AS (APA style):

Jiang, H. (2022). Teaching English to Young Learners in China and Ukraine. *Educational Challenges*, 27(2), 16-28.
<https://doi.org/10.34142/2709-7986.2022.27.2.01>



<https://doi.org/10.34142/2709-7986.2022.27.2.02>

LEARNING ENGLISH GRAMMAR BY MEANS OF M-LEARNING: A CASE STUDY

Received: 26/08/2022

Accepted: 29/09/2022

Marina BILOTSEKOVETS¹, & Tatiana FOMENKO²



¹ Ph.D. in Pedagogy, Associate Professor, Foreign Languages Department, Sumy National Agrarian University, Ukraine.

✉ E-Mail: mbelotserkovets@yahoo.com

 <https://orcid.org/0000-0003-4692-3444>



² Ph.D. in Pedagogy, Associate Professor, Foreign Languages Department, Sumy National Agrarian University, Ukraine.

✉ E-Mail: taniafomenko75@gmail.com

 <https://orcid.org/0000-0002-3048-7097>

ABSTRACT

Purpose. The paper deals with the effective implementation of mobile applications for learning grammar in the EFL course for students of non-linguistic higher educational institutions. The tasks for the research are the following: to discover the didactic properties of mobile applications that enable students' progress in learning English grammar and to apply them; observe students' attitudes towards mobile learning applications for training English grammar skills and their grounds.

Methodology. Quantitative outcomes of the experiment were calculated by means of the knowledge ratio technique. Scaling method was applied to organize the data into numerical form for comparative analysis of the experimental groups and control groups' achievements. A case study was conducted on the basis of Sumy National Agrarian University, Ukraine. A sample consisted of two experimental groups (35 students), and two control groups (36 students), aged 18-19, who studied second year at different faculties during 2021-2022 in the University and participated voluntarily in the study. In experimental groups the studying process was organized with the implementation of tablets and cellphones with the ability to access the

© Marina BILOTSEKOVETS, & Tatiana FOMENKO, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

Internet via Wi-Fi as mobile learning tools and mobile learning applications. A series of the interviews were held to learn students' attitudes towards mobile apps.

Results. *English grammar command levels in experimental groups are predominantly sufficient and high in contrast to the predominantly low and initial levels in control groups. The attitudes of students towards mobile apps for learning EFL are mostly positive.*

Conclusions. *It was concluded that the implementation of mobile learning tools provided the efficient mastering of English grammar by students of non-linguistic higher educational institutions. Improving of EFL teachers' methodological preparation for the introduction of mobile learning requires further researches in this sphere.*

KEYWORDS: *English as a Foreign Language, English Grammar Command, Grammatical Skills Training, Mobile Learning, Mobile Learning Applications.*

INTRODUCTION

Studying grammar is one of the most important aspects of learning a foreign language, since full-fledged communication cannot be efficient without observing grammatical rules of a certain language. In order to form a reasonable approach to teaching English grammar, educators should realize that even perfect knowledge of grammar does not give full command of the language, but full command of the language includes knowledge of grammar (Kokorina, & Litunova, 2020).

Grammatical speaking skills, like all other speaking skills, are characterized by such features as automaticity, flexibility and stability and are formed step by step. The formation of grammatical skills in productive speech should be carried out in stages, among them: 1) familiarization and initial consolidation; 2) training; 3) application. Acquaintance with new grammatical material for productive assimilation is mostly carried out in educational and speech situations, which are presented orally or in the process of reading under the guidance of a teacher.

However, the efficient performing of the following stages is to a greater extent dependable on students' efforts, diligence and hard work. Taking into account the peculiarities of modern generation students, successful realization of grammatical skills training and application can be achieved through the implementation of ICT (Bilotserkovets, & Gubina, 2019; Jackson, 2021; Chernenko, 2021). The current generation of youth as no one else reflects the trends of the times. Wide use of mobile phones and other devices has led to the fact that students are inclined to receive new knowledge and processing information in small portions and do it at any free minute (in the bus, while waiting in a line, i.e., intermingling with another activity) (Bilotserkovets, et al., 2021).

Currently, ICT and various digital devices have become an integral part of life of every individual. Digital mobile devices have taken a strong position not only in people's everyday life, they are also widely used in the learning process. This is expressed both in the widespread use of interactive learning tools and in the gradual introduction of applications for mobile phones based on various

platforms: Android, iOS, etc. into the learning process, that leads to the emergence of mobile learning.

The term “mobile learning” (m-learning) – refers to the use of mobile and portable IT devices such as PDAs (Personal Digital Assistants), mobile phones, laptops and tablet PCs in teaching and learning (Crompton & Traxler, 2018). Mobile learning must be distinguished from e-learning based on the use of a computer, laptop and the Internet. It can be seen as a form of e-learning using mobile devices. Mobile learning is closely related to electronic and distance education and complements it with the possibility of using any portable device, so the training is not strictly tied to the location of a trainee. In other words, mobile learning technologies eliminate time and location restrictions on gaining knowledge.

The advantages of mobile learning for EFL (English as a foreign language) learning are undeniable: it becomes available to millions of people, opens up with the opportunity of a learning strategy independent choice. Built-in dictionaries in which one can find a translation or explanation of an unknown word, as well as its transcription, greatly facilitate the process of learning a foreign language. M-learning tools provide effective EFL knowledge and skills formation by facilitating the students' access to quality training materials; individualizing the academic process in accordance with their needs and abilities; applying modern pedagogical, psychological and ICT technologies; enabling constant feedback and control over the quality of the gained knowledge.

Analysis of the literature on the subject of this research showed that the use of mobile technologies for EFL learning is not a fashion swing, but an essential pattern. Modern trends in the field of trained

personnel demands, as well as requirements for graduates' of higher education institutions for their competitiveness in the labor market, include a sufficient level of knowledge of foreign languages and digital skills. It is also relevant, because in non-linguistic higher educational institutions students have a few practical classes a week, moreover, not all grammatical phenomena of the English language are studied, but only a specially selected grammar proficiency compendium, that enables students' understanding and learning new practical material faster and more successfully.

Nevertheless, to express their own thoughts in a foreign language, students should master a number of grammatical structures, that compile the active grammatical minimum. The passive grammatical minimum includes such grammatical structures that students may not use to express their thoughts, but which are necessary for perceiving and understanding written information and oral speech of other people in a foreign language (Hovorun et al., 2021).

The paper is **aimed** to study effectiveness of the implementation of mobile applications for learning grammar in EFL course for students of non-linguistic higher educational institutions. To achieve the goal, it was planned to perform the following research tasks:

- to explore the didactic properties of mobile applications that positively affects students' academic progress in learning English grammar to apply them;
- to learn and regard students' attitudes towards mobile applications for learning English grammar.

METHODOLOGY

Participants. A case study of efficiency of mobile applications for learning English

grammar was conducted on the basis of Sumy National Agrarian University, Ukraine. The experimental survey was carried out in two experimental groups (EG), consisting of 35 students and two control groups (CG), consisting of 36 students; in total 71 participants aged 18-19, who studied their second year at different faculties during 2021-2022 in the university and participated voluntarily in the study. The syllabus of EFL course was identical for all of them and considered 2 classes a week.

Procedure. In EG and CG the explanation of new grammar material, consolidation of acquired knowledge and skills, as well as verification and control of already acquired ones were organized according to various schemes. In order to clearly identify the didactic characteristics of mobile technologies for learning English grammar, tablets and cellphones with the ability to access the Internet via Wi-Fi as a mobile learning tool and mobile learning applications were involved for EFL classes in EG.

It is worth noting the mobile applications used during this study: Linguo dictionary – online version, Wikipedia – an online encyclopedia, MX player – a program for viewing video content, Viber and WhatsApp – for sending assignments to students, as well as for conducting feedback from students, transferring files from one device to another, Bookmate – an online library, etc.

Learning English grammar was performed by means of the following facilities:

– *Learn English Grammar*, an online English grammar learning application developed by the British Council. It includes 25 grammar topics, 600 interactive tasks and thousands of exercises. There are two versions of the

program – with British and American variants of the English language.

– *Johnny Grammar's Word Challenge*, also developed by the British Council aimed at improving English grammar. This app offers students 60-second quizzes to test their vocabulary and spelling and improve their speaking skills. In total, the tests cover 12 grammar topics.

– *English Grammar in Use*, a program based on the manual of the same name written by Raymond Murphy for students with an intermediate level of EFL. It includes 145 explanations and exercises on past and present tense rules, interactive exercises, a dictionary and a study guide.

– *Mad Libs* is a popular game to test vocabulary and grammar, simple and suitable for students of any age and knowledge level. It is designed in a way that one player asks another for a list of words that must be put in the gaps in the story. Various hints help to complete the missing parts of the story.

Traditional teaching tools, such as textbooks, paper dictionaries and writing exercises were used in the process of teaching EFL in CG. The work in CG consisted in the preparation of projects on a given topic using paper dictionaries, textbooks and the materials that were prepared by teachers and displayed on the interactive board or online.

Preliminary knowledge tests were held at the initial stage in order to learn the baseline data of EG and CG students' English grammar proficiency. It was revealed that the students of EG and CG had approximately the same knowledge levels. The study of EFL with the implementation of mobile apps (in EG) took place during two semesters, then a final check of EG students' English grammar proficiency was made for comparative analysis with the level of CG students' English grammar proficiency.

Ultimate experimental diagnostics was performed through tests, oral answers, complex control works' results etc.

Quantitative processing of the results of exercises, oral and written answers was carried out by means of the knowledge ratio technique (Poplavskaya, 2009), which was determined according to the formula:

$$RK = (a + b + c)/3$$

in which **RK** presents the ratio of English grammar knowledge, **a** – systematics, **b** – volume, **c** – efficacy.

Scaling method was applied to organize the data into numerical form as follows: 5 points show a high level of formation of English grammar proficiency, 3 – sufficient level, 1 – low level, 0 – initial level correspondently.

The following numerical inequalities were taken for calculations: if $3,67 < RK \leq 5$, the level of English grammar proficiency is high; if $2,33 < RK \leq 3,67$, English grammar proficiency formation corresponds to the sufficient level; $1 < RK \leq 2,33$ – the level of English grammar proficiency is low; $1 \leq RK$ – the English grammar proficiency level is initial. To compare the results obtained in EG and CG, the following formula was used:

P1-P2

$$t = \sqrt{\frac{P1 \cdot q1}{N1} + \frac{P1 \cdot q2}{N2}}$$

N1 N2

where **P1, P2** – percentage; **q1, q2** – corresponding $100 - P1, 100 - P2$.

N1, N2 – quantity of the objects under the experimental survey.

If $t > 2$, so there is a significant difference, if $t < 2$, so there is no significant difference. If $t > 3$, so the difference is definitely reliable (Poplavskaya, 2009).

RESULTS

The comparison of the indicators of English grammar proficiency levels in experimental groups confirmed the sufficient (46 per cent) and the high (24 per cent) levels of English grammar proficiency (25 per cent of students had the low level and 5 per cent of students had initial level); in contrast to the predominantly low (49 per cent) and the initial (11 per cent) levels in control groups (28 per cent of students had the sufficient level of English grammar proficiency, 12 per cent of students were determined as having high level of grammar knowledge). The percentage and quantity data are presented in Table 1.

Table 1

The outcomes of the experiment on using mobile apps for learning English grammar

| Groups | Experimental groups, % (35 students) | | Control groups, % (36 students) | |
|-------------------|---|-------|------------------------------------|-------|
| | Before | After | Before | After |
| High | 10 | 24 | 11 | 12 |
| Sufficient | 25 | 46 | 24 | 28 |
| Low | 46 | 25 | 47 | 49 |
| Initial | 19 | 5 | 18 | 11 |

To fulfill the second task of the study a series of the interviews were held with EG students who were asked to express their attitude towards mobile apps that we used for learning English grammar.

Most students (92.7 per cent) revealed that learning mobile applications that had increased their motivation for learning. 85.7 per cent of EG students said that the mobile form of learning had stimulated a

great interest in English grammar issues they learnt, due to updated and authentic training materials and resources that are available anytime and anywhere.

The respondents stated that the implementation of the mobile gadgets and applications was very attractive and practical, because they preferred combining learning with using digital gadgets (smartphones, tablets) in everyday life (96.1 per cent). Furthermore, analysis of the students' responds about using mobile apps for training grammar enabled authors to single out the following points that had contributed to their positive perception of the sem-learning tools, among them: a detailed analysis of possible lexical and grammar mistakes in accordance with each grammar issue provided by chat bot (79.3 per cent); audiovisual, multimedia and other linguistic content related to each English grammar topic, availability of different levels of complexity that enables of students' consideration of their previous cognitive experience (89.6 per cent).

Many students stressed the efficacy and simplicity of information exchange during the performance of the assigned task as well as teachers' feedback via mobile communication (92.4 per cent). Concurrently, many respondents complained that while studying, they are often distracted by mobile applications of an entertaining nature (81.2 per cent). Students get busy with the main educational activity, but simultaneously they play games, communicate in social networks and chat applications, view video and audio resources that are not related to the topic of the task. Some students admitted the deficit of professionally-oriented educational mobile applications and programs (79.1 per cent); inconvenience of work on tablets and cell phones because of their small sizes and relatively small screen resolution (69.3 per cent). Almost 96 percent of respondents wanted to continue such practice permanently. The percentage and opinion points are presented in Table 2.

Table 2

Students' attitudes for using mobile apps for learning English grammar

| Nº | Attitudes and Grounds for Students' Grammar Improvement | Respondents, % |
|------------|--|-----------------------|
| 1. | Increasing students' motivation for learning | 92.7 |
| 2. | Availability of updated and authentic training materials and resources anytime and anywhere | 85.7 |
| 3. | Combining learning with using digital gadgets | 96.1 |
| 4. | Analysis of lexical and grammar mistakes provided by chat bot | 79.3 |
| 5. | Different levels of complexity for consideration students previous cognitive experience | 89.6 |
| 6. | Information exchange during the performance of the assigned task, teachers' feedback provided via mobile communication | 92.4 |
| 7. | Distraction from doing learning tasks by mobile applications of an entertaining nature | 81.2 |
| 8. | Small sizes and relatively small resolution of screen | 69.3 |
| 9. | Lack of educational mobile applications and authentic materials oriented on students' future specialty | 79.1 |
| 10. | Eagerness to continue mobile apps practice permanently | 96 |

DISCUSSION

In the process of the experimental study the authors focused on the didactic properties and didactic functions of mobile technologies, regarding them as characteristics that distinguish them from other teaching aids, used in the practice and theory of EFL learning (Göksua, & Aticib, 2013; Oz, 2014). Based on the generalization of data, the authors explored such didactic properties of mobile technologies in teaching a foreign language as accessibility through mobile devices; ability to store and transmit information in different formats (text, graphics, video, audio) (Sarrab, et al., 2012); ability to post comments or make changes to the content; possibility of using information and reference resources, etc. (Cheng, 2015); and their didactic functions: digitalization of the educational process; fostering information culture of students; the possibility of organizing a network discussion based on mobile technologies; the possibility of performing group and individual projects based on mobile technologies; organization of search and research work (Korucu, & Alkan, 2011).

Moreover, while preparing and conducting the experiment, the following methodological functions of mobile technologies were under review: formation of grammatical EFL skills and their representation in productive (speaking, writing) and receptive (listening and reading) types of foreign language speech activity; fostering students sociocultural and intercultural competencies through the learning material, chosen for studies (Wang, & Smith, 2013; Manea, & Gări-Neguț, 2021).

Therefore, the authors pointed out the advantages for the EFL learning process, provided by mobile applications implementation. It was found out that positive influence of mobile tools is

enabled by their expanding educational space beyond the university; promotion of student-centered approach to teaching and objective assessment of students' capabilities; introducing interactive and imitative visual aids into the active use of students; their lower cost in the telephony and communication market, compared to the cost of a personal computer; quick exchange of data and educational materials between students thanks to wireless technologies (Luque-Agullo, & Martos-Vallejo, 2015).

But, unfortunately, any educational tool has its own shortcomings, and mobile technologies are no exception. In the process of EFL learning using a tablet as a mobile device and the listed mobile applications, the following weaknesses were identified: deficit of prepared educational mobile applications and programs for students in their major, which would correspond to the topic of the working curriculum; entertaining nature of some applications, that distract students from the main educational activity during working hours (games, communication in social networks, chat applications, viewing video and audio resources that are not related to the topic of the task); small sizes and relatively small screen resolution (Yaman, et al., 2015; Măță, & Dobrescu, 2022).

Moreover, the lack of proper methodological training for educators and the insufficiency of professionally-oriented didactic material should be also admitted. Promoting the adoption of mobile learning apps in to the process of EFL learning in non-linguistic higher educational institutions is challenging because it is not only up to students but also to educators to see the benefits of such innovations and to change personal learning strategies (Li, et al., 2022). Nevertheless, currently, the formation of

an organized mobile learning system has just begun, the topic of studying the didactic potential of mobile devices in the educational process is very relevant and perspective for future research.

CONCLUSIONS

The research revealed a significant improvement of EG students' English grammar proficiency in comparison with CG students' English grammar proficiency. Such a difference was explained by the grown interest in EFL learning, increased productivity and efficacy of the academic process due to mobile tools implementation, which was a variable in the experiment. In addition,

students' perception of studying English grammar by means of m-learning apps was predominantly positive.

Thus, thanks to the work carried out on the subject of the research, it is possible to draw a conclusion about the effectiveness of using mobile learning technologies in professionally-oriented foreign language classes with students of non-linguistic higher educational institutions, provided by their specific didactic properties and functions. Unformed scientific and methodological preparation of EFL teachers for the introduction of mobile learning is a challenge, which requires further researches in this sphere.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Bilotserkovets, M., & Gubina, O. (2019). Target Language Teaching by Means of E-Learning: A Case Study. *Revista Romaneasca pentru Educatie Multidimensionala*, 11(4), 17-29. <https://doi.org/10.18662/rrem/154>
- Bilotserkovets, M., Fomenko, T., Kobzhev, A., Berestok, O., Shcherbyna, Y., Krekoten, O., & Kurinnyi, A. (2021). Dual Nature of Students' Knowledge Formation in the Pandemic Period: Pedagogical and Psychological Aspects. *Revista Romaneasca pentru Educatie Multidimensionala*, 13(3), 246-261. <https://doi.org/10.18662/rrem/13.3/450>
- Cheng, Y.-M. (2015). Towards an understanding of the factors affecting m-learning acceptance: Roles of technological *characteristics and compatibility*. *Asia Pacific Management Review*, 20(3), 109-119. <https://doi.org/10.1016/j.apmr.2014.12.011>
- Chernenko, A. (2021). Information and Digital Competence as a Key Demand of Modern Ukrainian Education. *Educational Challenges*, 26(2), 38-51. <https://doi.org/10.34142/2709-7986.2021.26.2.04>
- Crompton, H., & Traxler, J. (2018). Conclusion. Mobile learning in higher education: The challenges in context. In H. Crompton & J. Traxler (Eds.), *Mobile learning in higher education: The challenges in context*. Routledge. <https://doi.org/10.4324/9781315296739>
- Göksua, İ., & Aticib, B. (2013). Need for Mobile Learning: Technologies and Opportunities. *Procedia – Social and Behavioral Sciences*, 103(26), 685-694. <https://doi.org/10.1016/j.sbspro.2013.10.388>

- Hovorun, A., Petukhova, O., Nazymko, O., Kyrychenko, T., Bodnar, I., & Kanyuk, O. (2021). Learning Grammar of a Foreign Language (English) Using Multimedia Technologies. *International Journal of Education and Information Technologies*, 15, 289-294. <https://doi.org/10.46300/9109.2021.15.30>
- Jackson, E.A. (2021). Efficacy of Virtual Technology as the Way Forward for Teaching and Learning with the Experience of a Global Pandemic. *Educational Challenges*, 26(2), 6-12. <https://doi.org/10.34142/2709-7986.2021.26.2.01>
- Kokorina, L., & Litunova, M. (2020). Komunikatyvno spriamovani metody I pryomy navchannia hramatyky anhliiskoi movy [Communicatively Oriented Methods and Techniques of Teaching English Grammar]. *Aktualni pytannia humanitarnykh nauk*, 3(27), 128-132. <https://doi.org/10.24919/2308-4863.3/27.203682> [in Ukrainian].
- Korucu, A.T., & Alkan, A. (2011). Differences between m-learning (mobile learning) and e-learning, basic terminology and usage of m-learning in education., *Procedia – Social and Behavioral Sciences* 15, 1925-1930. <https://doi.org/10.1016/j.sbspro.2011.04.029>
- Li, F., Fan, S., & Wang, Y. (2022). Mobile assisted language learning in Chinese higher education context: a systematic review from the perspective of the situated learning theory. *Education and Information Technologies*, 27, 9665–9688. <https://doi.org/10.1007/s10639-022-11025-4>
- Luque-Agullo, G., & Martos-Vallejo, N. (2015). Mobile Learning in the Foreign Language Classroom. *Huarte de San Juan. Filología y Didáctica de la Lengua*, 15, 79-103. <https://hdl.handle.net/2454/20373>
- Manea, C.-N., & Gări-Neguț, O. (2021). When “Face-to-Face” is No Longer an Option: Classroom Management Challenges During the Covid-19 Pandemics. *Educational Challenges*, 26(2), 13-25. <https://doi.org/10.34142/2709-7986.2021.26.2.02>
- Măță, L., & Dobrescu, T. (2022). Benefits and difficulties of integrating mobile Technologies in the Academic Learning. *Revista Romaneasca Pentru Educatie Multidimensionala*, 14(1Sup1), 67-82. <https://doi.org/10.18662/rrem/14.1Sup1/537>
- Oz, H. (2014). Prospective English teachers' ownership and usage of mobile devices as m-learning tools. *Procedia – Social and Behavioral Sciences*, 141, 1031-1041. <https://doi.org/10.1016/j.sbspro.2014.05.173>
- Poplavskaya, S. (2009). *Formuvannya gotovnosti studentiv medychnyh koledzhiv do komunikatyvnoyi vzajemodiji u profesijnij diyalnosti* [Formation of Readiness of Students of Medical Colleges for Communicative Interaction in Professional Activity]. [Cand. Ped. Sciences dissertation, Zhytomyr Ivan Franko State University]. Library of Zhytomyr Ivan Franko State University. <https://library.zu.edu.ua/disertations.html>
- Sarrab, M., Elgamel, L., & Aldabbas, H. (2012). Mobile learning (m-learning) and educational environments. *International Journal of Distributed and Parallel Systems (IJDPDS)*, 3(4), 31-38. <https://doi.org/10.5121/ijdpds.2012.3404>
- Wang, S., & Smith, S. (2013). Reading and grammar learning through mobile phones. *Language Learning & Technology*, 17(3), 117-134. <http://lt.msu.edu/issues/october2013/wangsmith.pdf>
- Yaman, I., Şenel, M., & Yeşilel, D.B.A. (2015). Exploring the extent to which ELT students utilize smartphones for language learning purposes. *South African Journal of Education*, 35(4), 01-09. <https://doi.org/10.15700/saje.v35n4a1198>

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

ВИВЧЕННЯ ГРАМАТИКИ АНГЛІЙСЬКОЇ МОВИ ЗА ДОПОМОГОЮ МОБІЛЬНОГО НАВЧАННЯ: ПРИКЛАД ДОСЛІДЖЕННЯ

Метою статті є дослідження ефективного впровадження мобільних навчальних додатків для вивчення граматики в курсі «Англійської мови як іноземної» для студентів нелінгвістичних вищих навчальних закладів. Завданнями дослідження є: виявлення дидактичних можливостей мобільних навчальних додатків, які сприяють прогресу студентів у вивченні граматики англійської мови, і їх реалізація; виявлення ставлення студентів до мобільних навчальних програм для вивчення граматики англійської мови та їх підстави.

Методологія. Кількісні результати експерименту розраховувалися за допомогою методики співвідношення знань. Метод шкалювання був застосований для організації даних у числовій формі для порівняльного аналізу досягнень експериментальної та контрольної груп. Дослідження було проведено на базі Сумського національного аграрного університету, Україна. Вибірку становили дві експериментальні групи (35 студентів) і дві контрольні групи (36 студентів), віком 18-19 років, які навчалися на другому курсі різних факультетів протягом 2021-2022 років університету та добровільно брали участь у дослідженні. В експериментальних групах навчальний процес організовувався з використанням планшетів і мобільних телефонів із можливістю виходу в Інтернет через Wi-Fi як мобільного засобу навчання та мобільних навчальних додатків. Було також проведено серію інтерв'ю з метою виявлення ставлення студентів до мобільних додатків.

У **результаті** було встановлено, що рівні володіння граматикою англійської мови в експериментальних групах переважно достатні та високі на відміну від низького та початкового рівнів, які домінують у контрольних групах. Ставлення студентів до мобільних додатків для вивчення англійської мови головним чином позитивне.

Зроблено **висновок**, що впровадження мобільних засобів навчання забезпечило ефективне засвоєння граматики англійської мови студентами нелінгвістичних вищих навчальних закладів. Удосконалення методичної підготовки викладачів англійської мови до впровадження мобільного навчання потребує подальших досліджень у цій сфері.

КЛЮЧОВІ СЛОВА: англійська як іноземна, англійська граматика, тренування навичок граматики, мобільне навчання, програми для мобільного навчання.

CITE THIS ARTICLE AS (APA style):

Bilotserkovets, M., & Fomenko, T. (2022). Learning English Grammar by Means of M-Learning: A Case Study. *Educational Challenges*, 27(2), 29-38. <https://doi.org/10.34142/2709-7986.2022.27.2.02>



INDIVIDUALIZATION OF FUTURE FOREIGN LANGUAGES TEACHER'S PROFESSIONAL TRAINING IN DISTANCE EDUCATION CONDITIONS

Received: 23/08/2022

Accepted: 27/09/2022

Yaroslav CHERNIONKOV

Ph.D. in Education, Associate Professor, Department of Social-Humanitarian Disciplines, Donetsk State University of Internal Affairs, Ukraine, Kropyvnytskyi, Ukraine.

✉ **E-Mail:** yarcher78professor@gmail.com <https://orcid.org/0000-0001-6598-1581>

ABSTRACT

The year 2019 became a starting point in the educational sector of almost all countries of the European Union. The COVID-19 pandemic has changed the classical form of learning and teaching to a new, yet unexplored well, distance one. The start of the war in Ukraine on February 24, 2022 made this form of the educational process an integral characteristic of modern education in our independent country.

*The **purpose** is to investigate theoretical and practical conceptual foundations of individualization of future foreign languages teacher's professional training in distance education at the institutions of higher education.*

Methodology. *The methods of the educational research context, data collection, data analysis and reporting of the students' responses were used. Some questionnaires and interviews were used in this study to elicit the answers of different lecturers at Volodymyr Vynnychenko Central Ukrainian State Pedagogical University. We have found that the process of professional training becomes more effective if certain pedagogical conditions of students' teaching training are created and implemented. The basis for our research was scientific and pedagogical studies relevant to future foreign languages teacher's professional training in distance education conditions.*

Results. *The essence of the concepts "individualization of professional training", "distance studying of foreign languages" has been defined. The main tasks of individualization of future foreign languages teacher's*

© Yaroslav CHERNIONKOV, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

professional training in distance education conditions as well as the readiness of the lecturers and students of the foreign languages faculty for the introduction of distance form of future specialists' training in foreign philology have been characterized.

The main approaches to the training of future specialists in foreign languages and means of adaptation of lecturers and students in the conditions of the distance form of the educational process' organization have been analyzed. The author also outlined qualitative tools for constructive "teacher-student" communication within the distance training of a future teacher of foreign languages and highlighted ICT tools for training a future teacher in the field of foreign philology.

It has been determined that individualized distance teaching training is a complex pedagogical phenomenon comprising goals, contents, structures and processes of teaching. It determines the effectiveness of teaching a foreign language and requires a certain degree of learner's maturity.

In order to determine the main evaluative judgments of this study, research of various components of distance education and levels of professional training of the future teacher of foreign languages at IHE has been conducted. The analyzed results lead us to the opinion that, despite all its advantages and disadvantages, distance training of the future teacher of foreign languages reflects the modern conditions of the development of Ukrainian education and has taken its place in the educational process of every institution of higher education.

Conclusions. *Distance education allows you to study at home according to a convenient schedule and in the most comfortable conditions. In addition, knowledge control with this form of education can also be carried out in distance – students prepare scientific papers, pass electronic examination tests, take exams for teachers through video conferences, etc. The use of interactive technologies in a foreign language lesson involves an active creative process of cooperation between the teacher and students, and also stimulates cognitive activity during and after the lesson.*

KEYWORDS: *Distance Studying, Professional Training, SMART-Online, Pros and Cons, Distance Education.*

INTRODUCTION

Different researchers attribute the emergence of distance education to different periods. Thus, in some sources we find the statement that distance learning appeared as early as the 17th century, when Yakiv Kamenskyi introduced illustrated textbooks into the education system, with the help of which

it was possible to learn the basics of general sciences independently.

In Ukraine, the date of the official start of the introduction of distance learning can be considered January 21, 2004, when the "Regulations on distance learning" was approved by Order No. 40 of the Ministry of Education and Science of Ukraine, which marked the beginning of the

introduction of new technologies in the field of education.

The purpose of distance learning in higher education is to provide opportunities for students to study the educational material independently and receive the necessary consultations at a time convenient for them, wherever they are. Ukrainian legislation supports the rapid development of distance education. This is evidenced by various provisions and regulatory documents of the legislation of Ukraine related to this topic, namely the Law of Ukraine "On Education", "Concept of the Development of Distance Education in Ukraine", "Regulations on Distance Learning", the state program "Education", etc. (Starodiedova, 2021).

Distance education is a broad approach characterized by a high degree of variation. Such variation includes the types of media or technology used (print, radio, computer); the nature of the learning (workshop, seminar, degree program, supplement to traditional classroom, levels of support); institutional settings; topics addressed; and levels of interactivity support (face-to-face, online, blended, none). UNESCO defines distance education as "an educational process and system in which all or a significant proportion of the teaching is carried out by someone or something removed in space and time from the learner." Distance education requires:

- Structured planning;
- Well-designed courses;
- Special instructional techniques;
- Methods of communication by electronic and other technologies (Burns, 2011).

Nowadays, the individualization of education in foreign languages is an oft-discussed topic. With the use of adaptive tools in eLearning the individualization of

education can become so effective that the transfer of knowledge will be adapted to the student's personal characteristics. However, it is more demanding to satisfy all the students' needs than to choose the individualized approach to education through information and communication technologies.

Moreover, if the student is taught in accordance with their personal characteristics, they will probably achieve better results as far as knowledge gain is concerned (Kostolanyova, & Nedbalova, 2011).

The major effect of pandemic COVID-19 in online learning is the learning media. This situation pushes university members to look for the best format for the teaching-learning process. The changes of the system and competences conducted by the lecturers, students, and the university will be used in the pandemic period.

We agree with Tatas Transinata that online learning can be termed as a medium that can make the teaching-learning process more student-centered, more innovative, and even more flexible. The lecturers have realized distance learning in a new way, adapted the assignments to the new format of the lessons, which will be reflected positively on students' qualifications. The learning process needs a language laboratory to improve the students' language competence. Therefore, Language Laboratory is expected to be able to improve the quality of language competence through online media (Transinata, 2022) and due to the future foreign languages teacher's professional training process.

Thus, in our opinion, the process of teachers' training at a pedagogical institution of higher education is a process of complex organized development and individual self-improvement of the

student's personality and should be carried out in the process of individualization and on the basis of a personality-oriented approach. "The individualization of professional training of a future foreign language teacher" has been defined as a complex, multidimensional, multicomponent and multilevel concept that we consider from the perspectives of the educational triad: pedagogy, psychology and foreign language. It is characterized by a specially created environment with appropriate conditions and is based on specific approaches (Chernionkov, 2020).

The most widespread modern approaches to teaching foreign languages (FL) include: communicative-activity, competence, reflexive, cultural, level and professionally-oriented approaches. According to the communicative-activity approach, FL training should be activity-based, i.e. learning the rule of operating foreign language models occurs simultaneously with mastering their communicative-speech function.

The concept of competence-based approach in the teaching of FL is understood as the focus of the educational process on the formation and development of students' key (basic, basic, extra-subject) competencies and foreign language communicative competence. In the process of studying FL, reflective self-assessment, on the one hand, involves the ability to assess the level of formation of foreign language communicative competence, and on the other hand, the success of educational activities, that is, the result and methods of studying FL.

The result of training according to the cultural approach is the formation of students' foreign languages communicative competence, which ensures the use of the language in the conditions of a certain cultural context

based on the dialogue of cultures. The development of a level approach is related to the scientific definition of the levels of mastery of FL. Thanks to the efforts of the committee of the European Council for Modern Languages (European Council for Modern Languages), a unified system or scale for determining FL proficiency levels has been developed (Nikolaieva, 2013).

Competent command of a foreign language is considered an integral component of the professional training of students of any specialty. In this regard, the need to find ways of formation and development of students' ability for intercultural communication and readiness for cognitive activity through the transition from learning a foreign language as an educational subject to its practical application for professional purposes has been actualized. In modern studies on the problem of foreign language learning, foreign language professional competence is considered as a complex construct that includes cognitive, linguistic and interactive components (Sali, 2018).

The search for optimal approaches to the organization of the training of future specialists in FL requires the use of various approaches that make such training as effective as possible. In pedagogy, there are two main forms of education and training in higher education: classroom and non-classroom. In the course of the classroom form, there is a direct interaction between the student and the teacher, and the out-of-class form involves the student's independent study of the educational material, performance of practical and coursework, writing essays and abstracts, passing industrial practice (Zvierieva, 2018).

We do not agree with the author, because in modern conditions, such a vision is a little distorted, since in the conditions of

distance studying of foreign languages, there is no classroom teaching, and all the activities of students take place at a distance from the institutions of higher education.

In English language classes, with the help of Internet resources, you can solve a number of didactic tasks: form competences in all types of speech activity - listening, reading, writing, speaking, form and deepen, develop phonetic, lexical, grammatical competences, using materials from the global network; to form students' sustainable motivation, interest in learning English. In addition, such work is aimed at studying the possibilities of Internet resources for expanding the horizons of students, the skills to establish and maintain business relations and contacts with young people in English-speaking countries.

To form or improve lexical-grammatical competences, we advise you to visit the sites (for example, www.learnplus.com, <http://ischoolenglish.com> and many others). For example, there are specially prepared lessons for learning to read online (<http://www.english-to-go.com/index.cfm>), in which the experts of the Reuters news agency offer teachers, in a convenient format for copying to your disk, systematic classes with interesting texts for reading, exercises of a problematic nature, tasks for consolidating new vocabulary.

Numerous suggestions on the organization of correspondence are used to teach students English writing. To find writing partners for your students, you can make a request (<https://listserv.cuny.edu/>). Correspondence can be organized for various purposes: to implement joint projects, hold discussions, discuss current problems (Kostikova, & Bezbavna, 2018).

The **purpose** is to investigate theoretical and practical conceptual foundations of individualization of future foreign languages teacher's professional training in distance education at the institutions of higher education.

The tasks are a) to analyze the conceptual role and qualitative impact of distance studying of foreign languages; b) to analyze the essence of the concepts of "individualization of professional training", "distance studying of foreign languages"; c) to investigate theoretical and practical conceptual foundations of the studied theme at the Institutions of High Education; d) to elicit students' and lecturers' responses and process research results to get a complete picture of our research.

METHODOLOGY

The methods of the context of educational research, data collection, data analysis and reporting of the students' responses were used: there were three groups of methods used for achieving the purpose and tasks of the research. They are theoretical, empirical and statistical methods. So, among general theoretical methods we have chosen analysis and synthesis of pedagogical-psychological literature since they helped to study and describe main characteristics of such notions as "individualizations of professional training" and the "distance studying", as well as to make conclusion not only about their correlation but also about importance of applying this information for effective future foreign languages teacher' training at the distance platform.

The empirical (diagnostic) methods, namely testing, observation and discussion were used in the pedagogical experiment where we have been checking the readiness of lecturers and students for distance studying at Volodymyr

Vynnychenko Central Ukrainian State Pedagogical University. The statistical methods (such as Student's and Lecturers' questionnaires and interviews) were needed to evaluate the experiment results.

RESULTS

Currently, all pedagogical institutions of higher educational in Ukraine are working on improving the quality of pedagogical education in order to ensure its mobility, attractiveness and competitiveness in the labor market, taking into account the requirements of the Conceptual Foundations of the Development of Pedagogical Education of Ukraine and its integration into the European educational space.

One of the tasks of teacher professional training at the institutions of higher education should be actualization of conscious mastery of IT tools, activation of pedagogical self-organization, self-improvement of knowledge in the field of IT – formation of readiness of IT teachers to use IT in future professional activities (Hurzhii, Kartashova, & Lapinskyi, 2013).

Paraphrasing these authors, a huge role is played by the readiness of teachers and students to processes of distance education. This means, firstly, to what extent students are ready to perceive learning a foreign language remotely with all its characteristics, and secondly, to what extent the training of foreign language teachers allows them too qualitatively, technologically and modernly implement the educational process.

Individualized distance teaching is a complex pedagogical phenomenon comprising goals, contents, structures and processes of teaching. It determines the effectiveness of teaching a foreign

language and requires a certain degree of learner's maturity.

This maturity is defined through the following attributes: a) relative independence from teacher and teaching materials; b) ability to articulate problems; c) problem solving skills; d) ability to adapt the available knowledge to personal interests and circumstances; e) self-awareness and self-diagnostics; f) ability to observe and control not only the own learning process but also the broader process of own intercultural behavior; g) a sense of responsibility; h) ability to project own skills onto the future professional activity (Muntyan, & Valentinova, 2011).

The organization of studying foreign languages takes place as a subjective choice of options (mobile learning) and (blended learning) - when the student situationally shapes the learning process. Mobility provides an invaluable opportunity at anytime, anywhere to study audition or use Skype, Viber, Outlook or Zoom in dialogue with other students or teachers and even to form your information resource on cloud technologies.

Distance training in foreign languages field requires evaluative thinking, the formation of so-called design thinking, focused on combining their own interests, intelligence with the capabilities of information and communication technologies, understanding that stopping the innovative development of education, introduction of new learning technologies and technological progress is impossible. We need to improve our professional level, adapt to new working conditions, constantly monitor the smart potential of mobile devices, track the appearance of new mobile Learning apps on the Internet (Stezhko et al, 2021).

The use of distance learning technologies in the modern education process of a teacher training university calls for a shift in the forms and methods of future primary school teacher training – from the demonstrative and explanatory ones to search, problem solving, project-based, research methods that are aimed at students' independent cognitive activities in obtaining and processing information and acquiring practical skills (Mukoviz at al, 2018). But this aspect is to be discussed.

Cognitive teaching methods are intended to help students to assimilate new information with already acquired knowledge and modify their intellectual structure to accommodate this information. For example, educators-cognitivists allow students to explain the new material in their own words, ask them questions for structuring the gained material, help them to correlate with the learned material, and accommodate the entire material by providing a clear organizational structure (Shandruk at al, 2019).

Therefore, the analysis of educational programs for the training of future teachers of foreign languages allowed us to conclude that the content of their training is very slowly being transformed in the direction of meeting today's needs for the training of competitive specialists, communicatively competent, who are characterized not only by professional knowledge, but also by leadership qualities, psychological stability, and creative activity, self-confidence, the ability to adapt in the distance education environment (Tkachenko, 2020).

Adapting the author's characteristics to the subjects of our research, we come to the conclusion: diagnostic work is aimed at studying the personal qualities of young specialists, their professional suitability, identifying difficulties encountered in the

educational process; educational and methodical work aims to create and conduct seminars on methodological aspects of studying educational fields, development and implementation of new pedagogical technologies; psychological training work involves conducting trainings on improving communication styles with students, parents, colleagues; development of positive qualities; formation of the ability to influence the team; self-development as a person and a professional (Shalivska, 2020).

Scientists Belmaz Ya. and Sergeeva I. consider 5 tools of constructive communication that have shown their effectiveness in the educational environment in the conditions of distance education: non-violent communication, self-message, SMART goal setting, accurate praise and positive framing; to demonstrate specific possibilities of their application in the study of foreign languages.

Non-violent communication is based on empathy, (self) respect, conflict-free goal achievement. The task of the second stage is to create an I-message, which is always formulated in the first person and is dedicated to the feelings of the subject of the statement. It is not allowed to include in the statement of evaluation characteristics about the student. For example (in parentheses are the typical You-statements of the teacher, which contain an assessment or direct accusations, and are therefore ineffective.

Setting goals by SMART is a mnemonic abbreviation that deciphers the main requirements for the formulation of goals: Specific (concrete, specific), Measurable (such that measurable), Attainable (such that can be achieved), Relevant (relevant), Time-bounded (determined in time). Positive framing is based on consistent positive correction of student behavior

using purposeful praise and constructive criticism.

The teacher's activities are aimed at maintaining a strong position in shaping and maintaining in students the desired types of behavior or activity, as well as that their path to them is direct and short. Accurate praise is based on data that individuals who are praised for permanent attributes (intelligence, talent), ultimately learn worse than those who are encouraged for diligence, effort, hard work (Belmaz, Serhieieva (2019).

Software products used in the practice of institutions of higher education in Ukraine, or educational electronic resources in a foreign language can be conventionally divided into the following groups according to their content and functional purpose: 1) information and reference materials (encyclopedias, handbooks, dictionaries, magazines, newspapers, almanacs); 2) electronic books for reading; 3) video films, clips and videos on YouTube; 4) electronic libraries and repositories; 5) methodical materials on electronic media (plans of seminar and practical classes, plans-summaries of lectures, methodical recommendations for teaching aspects of language and types of speech activity, tests and other control and measurement materials); 6) Internet resources; 7) combined electronic learning tools (curriculum, electronic textbooks, exercises and educational games); 8) educational and methodical software tools for accompanying lectures (demonstration materials, presentations, projects, computer developments for seminar and practical classes, etc.), created by teachers for a specific class (Osova, 2018).

As the main aim of foreign language learning is an ability to communicate, this common feature is significant for our research so we studied it carefully and

discovered that from psycholinguistic point of view, communication may include the following components: the motivational and cognitive component, the analytical and technological component, the integrative and personal component, the socio-cultural component, the reflexive component, the emotional and evaluation component (Kostikova et al, 2020).

Therefore, at this stage of distance education, IT-tools are the main lever in the formation of IT-competence of the future teacher of foreign languages, and "the formation of information competence by means of IT allows you to use knowledge, skills and abilities in your work in the direction information and communication technologies, which is a criterion of professional suitability for improving the quality of education in the framework of distance education" (Lebedieva, 2018).

As part of this work, we conducted several studies with the aim of identifying:

- the level of readiness of the teachers / lecturers of Volodymyr Vynnychenko Central Ukrainian State Pedagogical University for the introduction of distance education and training;
- the level of readiness of students of the Faculty of Foreign Languages of Volodymyr Vynnychenko Central Ukrainian State Pedagogical University for the introduction of distance education and training;
- the level of self-assessment of the teachers of the Volodymyr Vynnychenko Central Ukrainian State Pedagogical University in relation to their qualification requirements for distance education and training;
- the most favorable type of training for a specialist in foreign languages;

- level of knowledge of a foreign language and professional training.

Research was conducted during April-June 2022 among students of all undergraduate courses and teachers. We used questionnaires, surveys, telephone and traditional interviews and final exams in each course. Let's analyze the results of this experimental study.

- So, according to the results of teachers' answers for 2020, only 10% were ready to implement the distance form; 15% are more prepared than unprepared and 75% of all interviewed teachers/lecturers were not ready for a new and unexpected challenge in their professional activities. Two years later, the results of teachers show that now, on the contrary, 85% are already ready for distance education, 10% are more unprepared than ready, and 5% are still not ready for this integral process of the education field.

This means that in two years the teachers were able to qualitatively adapt to the conditions of this form of professional training and increase their level of readiness and their own level of qualification.

- 50% of faculty teachers determine their level of self-assessment in 2022 regarding their qualifications according to means and methods of distance education as very high; 40% are defined as medium and only 10% as low.

This shows that half of all surveyed professors and teachers are ready for the implementation of distance education, have appropriate educational and methodological support and have good skills and self-assessment skills.

- The most popular answers of teachers to the question "WHAT do you see as the most effective means of improving the

situation with distance training of future specialists in foreign languages?" were:

- equipping the faculty laboratory with new modern equipment or creating a new distance education laboratory (95%)
- professional development courses, both national and foreign (85%);
- replenishment of educational and methodological support of the faculty (75%);
- MOODLE courses and all other distance education IT-courses (70%).

This indicates that until today, educational-methodological support and readiness of teachers for the implementation of distance education wants to be better.

- The student responses regarding their readiness to introduce this type of training and readiness for the educational distance process of their faculty were as follows:

- 1st course – 80% ready, 10% more unready than ready and 10% not ready for this form;
- 2nd year – 70% are ready, 25% are more unprepared than ready and 5% are not ready for the studied form;
- 3rd year – 60% ready, 10% more unready than ready and 30% not ready for the studied form;
- 4th year – 50% ready, 25% more unready than ready and 25% not ready for the studied form.

We see a qualitative drop in the level of students' readiness to perceive all information remotely from the results of the 1st year to the results of the 4th year. This indicates that it is difficult for graduates of the faculty to adjust from the usual form of education to distance education, and the 1st year, on the

contrary, will be able to qualitatively assess the advantages and disadvantages of this form of professional training.

- The results of student surveys regarding the most favorable type of professional training in foreign languages are interesting:

- 1st course – distance (90%), mixed (5%) and classical (5%);
- 2nd year – distance (80%), mixed (15%) and classical (5%);
- 3rd year – distance (25%), mixed (50%) and classical (25%);
- 4th year – distance (10%), mixed (5%) and classical (85%).

We see that the first and second courses are guided by the emotions of the wartime and the circumstances they got into due to the occupation of Ukraine by the aggressor state. The third year understands the importance and qualitative characteristics of classical education, but the fear of modern conditions makes itself felt, so for them the mixed system is exactly the way out of this situation. On the other hand, 4th-year students are strong supporters of classical education and, as experienced students; they can assess the qualitative advantages and disadvantages of all types of professional training.

- According to the results of the final exams for each course, we were able to assess the quality level of foreign language proficiency and the level of professional training of future foreign language teachers:

- 1st course – high (70%), medium (25%), low (5%).
- 2nd year – high (80%), medium (10%), low (10%).
- 3rd year – high (80%), medium (5%), low (15%).

- 4th year – high (95%), medium (3%), low (2%).

These results indicate that first-year students have adapted to the university system of education and training and have shown high-quality results. The results of the students of the 2-4 courses show the quality component of the system of professional training of the future foreign language teacher in the higher education institution organized by us.

DISCUSSIONS

The result of the individualization of the future foreign languages teacher's professional training in the conditions of distance education is the acquisition of the qualities of professional growth of the future foreign languages teacher. These discussed qualities include the ability to set goals, make adequate decisions, the desire to teach, acquire professional knowledge and skills, the ability to establish social contacts, engage in self-evaluation, self-education, self-development, self-improvement.

We believe that thanks to distance professional training, the future teacher can master new methods and techniques of teaching a foreign language, create his own vision of the process of learning foreign languages, create an electronic course, master IT -tools in teaching foreign languages, establish professional foreign language communication and increase the level of professional communicative competence.

The use of distance learning technologies in the modern education process of a teacher training university calls for a shift in the forms and methods of future foreign languages teacher's training – from the demonstrative and explanatory ones to search, problem solving, project-based, research methods that are aimed at students' independent cognitive activities

in obtaining and processing information and acquiring practical skills (Mukoviz at al, 2018). But all the above aspects are to be discussed.

CONCLUSIONS

What are the advantages and disadvantages of distance learning of a foreign language in general? Probably, the main advantage is convenience: costs for travel and living in another city are reduced; all self-study materials, lab assignments, and webinar links are available online. Not the last place is taken by mobility, which today is one of the usual features of our life; you can enrich your knowledge in any way: with a teacher, in a conversation club, in the country of the language being studied, in social networks or on free language resources.

Another advantage is that distance learning, in particular the online form, provides more technical advantages and saves on printed materials. It should also be noted the democratic nature of distance learning, since education can be obtained at any university in the world.

Comfort and freedom in the case of distance education require more self-discipline than face-to-face education, so

they can become a certain disadvantage of this type of education. Some students stop learning a foreign language, thinking that distance learning in general is an empty business. In the case of distance learning, it should be remembered that it requires additional development of responsibility and self-control.

Among the minuses, it should be emphasized the lack of "live" communication, a unique student environment; lack of special computer knowledge; lack of professional technical support, etc. Considering the above, the advantages of distance learning are much greater than the disadvantages.

Therefore, the implementation of the system of distance studying in the process of individualization of professional training of future foreign language teachers will maximize the continuous studying of modern high education students and achieve high performance. We understand that our observation is only part of the research program we have created for this issue. Further studies we see in the further analysis of the practical-methodical system of SMART-process of professional training of future foreign language teachers.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Belmaz, Ya. M, & Serhieieva, I.S. (2019). Instrumenty Efektyvnoi Komunikatsii Dlya Vykladachiv Inozemnykh Mov Pedahohichnoho Vuzu [Tools of Effective Communication for Teachers of Foreign Languages of the Pedagogical High School]. *Zbirnyk naukovykh prats "Pedahohika ta psykholohiia"*, 62, 3-15. <https://doi.org/10.34142/2312-2471.2019.62.01> [in Ukrainian].

- Burns, M. (2011). *Distance Education for Teacher Training: Modes, Models, and Methods*. Education Development Center, Inc.. https://www.researchgate.net/publication/259440600_Distance_Education_for_Teacher_Training_Modes_Models_and_Methods
- Chernionkov, Ya. (2020). The Digitalization of the Educational Process as a Qualitative Characteristic of the Individualization of a Future Teacher of Foreign Languages' Professional Training. *Astraea*, 1(1), 48–63. <http://doi:10.34142/astraea.2020.1.1.03>
- Hurzhi, A. M., Kartashova, L. A., & Lapinskyi, V. V. (2013). IT-hotovnist vchyteliv inozemnykh mov: metodolohiia, teoriia, tekhnolohii: navchalnyi posibnyk [IT readiness of foreign language teachers: methodology, theory, technologies: a study guide]. Instytut obdarovanoi dytyny. <https://lib.iitta.gov.ua/2055/1/IT-готовність.pdf> [in Ukrainian].
- Kostikova, I., Holubnycha, L., Fomenko, K., Shevchuk, A., Kadaner, O., & Moshynska, O. (2020). The Psycholinguistic Standpoints in English Speech Activity. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 11(2), 199-210. <https://doi.org/10.18662/brain/11.2/83>
- Kostikova, I.I., & Bezbavna, H.I. (2018). Vykorystannia Internet-resursiv na zaniattiakh z inozemnoi movy [Use of Internet-Resources at Foreign Language Classes]. *Zbirnyk naukovykh prats "Pedahohika ta psykholohiia"*, 59, 76-84. http://nbuv.gov.ua/UJRN/znpkhnpu_ped_2018_59_11
- Kostolanyova, K., & Nedbalova, S. (2017). Individualization of Foreign Language Teaching through Adaptive eLearning. *International Journal of Distance Education Technologies (IJDET)*, 15(2), 1-17. <http://doi.org/10.4018/IJDET.2017040101>
- Lebedieva, V. V. (2018). Vykorystannia Multymediinoho Obladnannia V profesiinii Diialnosti Maibutnioho Vchytelia [Use of multimedia equipment in professional activities of the future teacher]. *Zbirnyk naukovykh prats "Pedahohika ta psykholohiia"*. 59, 170-181. <http://doi.org/10.5281/zenodo.1228386> [in Ukrainian].
- Nikolaieva, S. (2013). *Metodyka navchannia inozemnykh mov i kultur: teoriia i praktyka: pidruchnyk dlia stud. klasychnykh, pedahohichnykh i linhvistychnykh universytetiv*. [Methods of teaching foreign languages and cultures: theory and practice: a textbook for students of classical, pedagogical and linguistic universities]. Lenvit. <https://kmaecm.edu.ua/wp-content/uploads/2021/06/bigych-o.-b.-borysko-n.-f.-boreczka-g.-e.-ta-in.-2013-metodyka-navchannya-inozemnyh-mov-i-kultur-teoriya-i-praktyka.pdf> [in Ukrainian].
- Muntyan, S., & Valentinova, L., (2011) The Individualization of Foreign Language Teaching in the University-level Professional Education. *Revista Romaneasca pentru Educatie Multidimensionala*, Year 3, 8, 7-14. <http://revistaromaneasca.ro/wp-content/uploads/2012/01/The-Individualization-of-Foreign-Language-Teaching-in-the-University-level-Professional-Education.pdf>
- Mukoviz, O.P., Kolos, K.R., Kolomiets, N.A. (2018). Distance Learning of Future Primary School Teachers as a Prerequisite of Their Professional Development throughout Life. *Information Technologies and Learning Tools*, 66(4), 42-54. <https://doi.org/10.33407/ITLT.V66I4.2265>

- Osova, O.O. (2018). Dosvid vykorystannia Tehnologii Navchannia Inozemnykh Mov Studentiv V Umovakh Smart-Osvity [Experience of Using the Technologies for Teaching Students Foreign Languages in the Conditions of Smart Education]. *Zbirnyk naukovykh prats "Pedahohika ta psykholohiia"*. Kharkiv, 60, 53-64. <http://doi.org/10.5281/zenodo.2539352> [in Ukrainian].
- Sali, O. V. (2018). Formuvannia Komunikatyvno-Interaktyvnoi Kompetentnosti U protsesi Profesiino Oriientovanoho Navchannia Studentiv Inozemnoi Movy [Formation of communicative-interactive competence in the process of professionally oriented education of students in foreign language]. *Zbirnyk naukovykh prats "Pedahohika ta psykholohiia"*, 60, 64-77. <http://doi.org/10.5281/zenodo.2539358>
- Starodiedova, L. (2021). Osoblyvosti navchannia inozemnoi movy u vyshchii shkoli v umovakh realizatsii dystantsiinoi osvity [Peculiarities of Foreign Language Learning in Higher Education in the Conditions of Distance Education]. *Aktualni problemy navchannia inozemnykh mov v umovakh dystantsiinoi osvity. Zbirnyk naukovykh prats*, 76-79. <http://idgu.edu.ua/wp-content/uploads/2021/03/aktualni-problemy-navchannja-inozemnyh-mov.pdf> [in Ukrainian].
- Stezhko, Y., Grytsyk, N., Mykhailiuk, M., Tekliuk, H., Rusavska, O., & Beregova, O. (2021). Distance Learning for a Foreign Language in the Postmodern Age and its Forms. *Postmodern Openings*, 12(2), 339-353. <https://doi.org/10.18662/po/12.2/311>
- Shalivska, Yu. (2020). Problema Pofesiinoi Adaptatsii Molodykh Pedahohiu Naukovykh Doslidzenniakh [Problem of Professional Adaptation of Young Teachers in Scientific Research]. *Innovatyka u vykhovanni*, 11, 2, 187-195. <https://doi.org/10.35619/iuu.v2i11.225> [in Ukrainian].
- Shandruk, S.I., Smirnova, L.L., Cherednichenko, N.Yu., Lysenko, L.O., Kapitan, T.A., Chernionkov, Ya.A., & Spinul I.V. (2019). Future Human Development from the Standpoint of Dominant Philosophical Concepts of the United States Pedagogical Education. *ASTRA Salvensis, Supplement no. 1*, 323-333. <https://astrasalvensis.eu/blog/mdocs-posts/24-svitlana-i-shandruk-lina-i-smirnova-natalia-yu-cherednichenko-liudmyla-o-lysenko-tetyana-a-kapitan-future-human-development-from-the-standpoint-of-dominant-philosophical-concepts>
- Tkachenko, N.M. (2020). Stan problemy formuvannia profesiinoho imidzhu maimutnykh uchyteliv inozemnykh mov v osvitnii praktytsi [Status of the Problem of Professional Image Formation of future Teachers of Foreign Languages in Educational Practice]. *Zbirnyk naukovykh prats "Pedahohika ta psykholohiia"*, 63, 168-179. <https://doi.org/10.34142/2312-2471.2020.63.18> [in Ukrainian].
- Transinata, T. (2022). A New Challenge: The Reconstruction of Online Language Laboratory on Distance Learning in Indonesia. *Educational Challenges*, 27(1), 34-47. <https://doi.org/10.34142/2709-7986.2022.27.1.03>
- Zvierieva, N.L. (2018). Tekhnolohichniy pidhid Do Formuvannia Pedahohichnoii Komunikatyvnoi Kompetentnosti Maibutnioho Vchytelia [Technological Approach to the Formation of the Pedagogical Communicative Competence of the Future Teacher]. *Zbirnyk naukovykh prats "Pedahohika ta psykholohiia"*, 59, 161-170. <http://doi.org/10.5281/zenodo.1227097> [in Ukrainian].

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

ІНДИВІДУАЛІЗАЦІЯ ПРОФЕСІЙНОЇ ПІДГОТОВКИ МАЙБУТНЬОГО ВЧИТЕЛЯ ІНОЗЕМНИХ МОВ В УМОВАХ ДИСТАНЦІЙНОЇ ОСВІТИ

2019 рік став точкою відліку в освітньому секторі майже всіх країн Європейського Союзу. Пандемія COVID-19 змінила класичну форму навчання та викладання на нову, ще не добре вивчену, дистанційну. Початок війни в Україні 24 лютого 2022 року зробив таку форму освітнього процесу невід'ємною характеристикою сучасної освіти незалежної країни.

Мета дослідження – дослідити теоретичні та практичні концептуальні основи індивідуалізації професійної підготовки майбутнього вчителя іноземних мов в умовах дистанційної освіти у закладах вищої освіти.

Методологія. Використовувалися методи контексту освітнього дослідження, збору даних, аналізу даних та звітування відповідей студентів. У цьому дослідженні були використані деякі анкети та інтерв'ю, щоб отримати відповіді різних викладачів Центральноукраїнського державного педагогічного університету імені Володимира Винниченка.

Встановлено, що процес професійної підготовки стає більш ефективним за умови створення та реалізації певних педагогічних умов педагогічної підготовки студентів. Основою нашого дослідження стали науково-педагогічні дослідження щодо професійної підготовки майбутнього вчителя іноземних мов в умовах дистанційної освіти.

Результати. Визначено сутність понять “індивідуалізація професійної підготовки”, “дистанційне навчання іноземних мов”. Охарактеризовано основні завдання індивідуалізації професійної підготовки майбутнього вчителя іноземних мов в умовах дистанційної освіти, а також готовність викладачів і студентів факультету іноземних мов до запровадження дистанційної форми підготовки майбутніх фахівців іноземної філології.

Проаналізовано основні підходи до підготовки майбутніх фахівців з іноземних мов та засоби адаптації викладачів і студентів в умовах дистанційної форми організації навчального процесу. Автор також окреслив якісні засоби конструктивної комунікації «викладач-студент» у рамках дистанційної підготовки майбутнього вчителя іноземних мов та висвітлив засоби ІКТ для підготовки майбутнього вчителя в галузі іноземної філології.

Визначено, що індивідуалізоване дистанційне навчання є комплексним педагогічним явищем, яке включає цілі, зміст, структуру та процеси навчання. Це визначає ефективність навчання іноземної мови і вимагає певного рівня зрілості учня. З метою визначення основних оціночних суджень даного дослідження було проведено дослідження різних компонентів дистанційної освіти та рівнів професійної підготовки майбутнього вчителя іноземних мов у ЗВО.

Проаналізовані результати приводять нас до думки, що, незважаючи на всі свої переваги та недоліки, дистанційна підготовка майбутнього вчителя іноземних мов відображає сучасні умови розвитку української освіти та займає своє місце в освітньому процесі кожного закладу вищої освіти.

Висновки. Дистанційна освіта дозволяє навчатися вдома за зручним графіком і в максимально комфортних умовах. Крім того, контроль знань за такої форми навчання може здійснюватися і дистанційно – учні готують наукові роботи, здають електронні екзаменаційні тести, складають іспити для викладачів через відеоконференції тощо. Використання інтерактивних технологій на уроці іноземної мови передбачає активну творчий процес співпраці вчителя та учнів, а також стимулює пізнавальну активність під час і після уроку.

КЛЮЧОВІ СЛОВА: дистанційне навчання, професійна підготовка, SMART он-лайн, плюси та мінуси, дистанційна освіта.

CITE THIS ARTICLE AS (APA style):

Chernionkov, Ya. (2022). Individualization of Future Foreign Languages Teacher's Professional Training in Distance Education Conditions. *Educational Challenges*, 27(2), 39-53. <https://doi.org/10.34142/2709-7986.2022.27.2.03>



<https://doi.org/10.34142/2709-7986.2022.27.2.04>

DEVELOPMENT OF COMPETENCY-BASED APPROACH TO EDUCATION

Received: 20/06/2022

Accepted: 25/07/2022

**Liudmyla HOLUBNYCHA¹, Tetiana SHCHOKINA²,
Natalia SOROKA³, & Tetiana BESARAB⁴**



¹ D. Sc., PhD, Full Professor, Department of Foreign Languages # 3, Yaroslav Mudryi National Law University, Kharkiv, Ukraine.

✉ E-Mail: golubnichaya11@gmail.com

id <http://orcid.org/0000-0002-8252-9893>



² Ph.D., Associate Professor, Department of Foreign Languages # 2, Yaroslav Mudryi National Law University, Kharkiv, Ukraine.

✉ E-Mail: meja3777@gmail.com

id <https://orcid.org/0000-0002-8894-2216>



³ Ph.D., Associate Professor, Department of Foreign Languages # 2, Yaroslav Mudryi National Law University, Kharkiv, Ukraine.

✉ E-Mail: sorokanata74@gmail.com

id <https://orcid.org/0000-0002-8652-917X>



⁴ Ph.D., Associate Professor, Senior Lecturer of Yaroslav Mudryi National Law University, Kharkiv, Ukraine.

✉ E-Mail: besarabtp73@gmail.com

id <https://orcid.org/0000-0002-3667-3886>

© Liudmyla HOLUBNYCHA, Tetiana SHCHOKINA, Natalia SOROKA, & Tetiana BESARAB, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

ABSTRACT

*The paper deals with competency-based education. Both the development of the category “competence” and application of competences in educational sphere were considered. The **purpose** is to examine the development of competency-based approach to teaching and learning from the standpoint of modern educational paradigm.*

*The **methods** of the investigation are analysis and syntheses of the associated researches used to collect and present the findings and draw the conclusion.*

*The **results** revealed that competency-based education appeared under the influence of the term “competence”; in its development three main stages may be distinguished: 1) 1960-1970 (introduction of the category “competence” in the theory and practice of language learning); 2) 1970-1990 (extension of the studied phenomenon to the field of management and leadership); 3) since the 1990s to the present (comprehensive consideration and analysis of the stated category; finding the blocks of competencies, the principles of systematization; studying the structure of competencies).*

*The **conclusion** is that in modern educational system competency-based approach is one of the central as existence of the system of competences contributes in description of academic and professional profiles, levels and results of higher education at the international level. Moreover, due to the application of the system of competencies, the process of expanding academic and professional recognition and mobility, as well as increasing the comparability and compatibility of diplomas and qualifications has become possible.*

KEYWORDS: *Competence, Competency-Based Education, Development of the Approach, Education, Methodical Approach.*

INTRODUCTION

The competency-based approach to teaching and learning is one of the central in modern educational paradigm and it is usually considered as a set of general principles for determining the goals of education, selecting content, organizing the educational process and evaluating educational results.

The reasons why this approach has become the key one were determined by the trends of social development: the acceleration of the pace of development of society and the strengthening of the uncertainty factor; changing lifestyles at all levels beginning from global, through

state, to individual; introduction of market mechanisms in vocational education; the increasing role of horizontal mobility during working life, the transformation of many professions, the dominance and complication of the tasks of personal growth and development. In this situation, it is important to develop in a person such qualities as mobility, dynamism, constructiveness, professional universalism.

Thus, as a result of studying the labor market and determining the requirements that are formed on it in relation to the employee the ideas of the competency-based approach to teaching

and learning appeared in educational area.

Analysis of researches shows topicality of the stated problem in the scientific world. So, most attention of the scientists is paid to applied aspects of the competency-based approach to teaching different subjects both in secondary (Bowden, 2004; Bykovska, 2007; Hurnyak, 2008) and higher schools (Griffith, Lim, 2014; Hafiyak, Kononets, 2019; Kostikova, et al., 2019; Khodan, 2013; Medvedovska, 2011; Rybalko, 2015).

A considerable number of scientific investigations are devoted to theoretical aspects of the approach under study (Boychuk, 2013; Levine, Patrick, 2019; Luhovyi, 2009; Ovsienko, 2017; Sturgis, et al., 2011). There are papers related to the development of certain hard and soft competences (Holubnycha, et al., 2019; Danik, 2016; Lench, et al. 2015; Nestulya, 2018; Pellegrino, Hilton, 2012; Vandergrift, 2002). Some researchers address to historical issue of the phenomenon (Khoruzha, 2012).

However, the problem of competency-based approach to education in the aspect of its development needs to be analyzed comprehensively.

Thus, the **purpose** of the study is to examine the development of competency-based approach to teaching and learning from the standpoint of modern educational paradigm.

METHODOLOGY

As the paper is of theoretical nature general theoretical methods were applied to it. They are analysis and synthesis of the associated researches that enabled to collect and present the findings and draw the conclusion as well as narrative method of offering the material.

RESULTS

Generalization of research on the problem of the competency-based approach allowed us to distinguish three stages of its development.

The *first stage* (1960-1970) is characterized by the introduction of the category “competence” into the scientific apparatus. Since the 1960s the corresponding term began to indicate some hidden human qualities that, other things being equal (knowledge, diploma, work experience), contribute to professional and life success. At first the term was used to denote the knowledge of the language system, gradually, in contrast to the linguistic competence, the term “communicative competence” appeared which began to be understood as the ability to communicate through language.

The *second stage* (1970-1990) is associated with the meaningful development of the concept of “social competence”. So, the category “competence” began to be applied not only in the theory and practice of language learning but also in assessing the level of professionalism in the field of management and leadership. The new notion of competence has become a management tool; a dictionary of competencies was presented, as well as a practical guide for adapting competency models for various types of activities.

The transformation of competence into a management tool began in the 1970s and is seen as the result of a change in the management paradigm: from a hierarchical, bureaucratic, top-down management system to a democratic, self-organizing one. In the former model of the so-called “scientific management”, the object was precisely measured indicators of labor productivity – the sequence of operations, output, time spent.

The main tools used to be working timing sociometry, rational organization of the workplace. In the new model, named the “model of human relations” or “motivational model”, the object of control is the “subtle” aspects of the inner world of the individual his abilities, motives, desires.

As motivational management is believed to be based on the psychological concept of a motive as an unconscious desire, inaccessible to self-observation McClelland (1973), an American psychologist, proposed a new methodology for selecting personnel, which seemed to him more productive than IQ (“intelligence quotient”).

It consisted in the analysis of tests of thematic apperception, which makes it possible to predict what type of behavioral strategy a person is prone to. The concept of McClelland is based on the idea of three main motives of human activity, which are: the need for achievement, the need for power, the need for participation (affiliation).

At the same time, the psychologist was most interested in the first two motives in two opposite behavioral strategies, namely: avoiding failure and focusing on success. In the work of McClelland “Testing for Competence Rather Than for ‘Intelligence’” (1973), which is considered the starting point of the competency-based approach in management, the term “competence” is determined as an index, a numerical indicator that allows measuring the strength of a motive in a 100-point system as the ratio between the hope for success and the fear of failure.

Starting with McClelland, the competency-based approach is associated with the formalization of things that are difficult to formalize, with the ability to calculate behavioral models predicted using psychological tests.

In the 70-80s of the 20th century in management, there was a real competency boom. The problems of an analysis of the behavioral aspects of various professional tasks, the “fragmentation” of behavioral elements, the compilation of “competence portfolios” on their basis and others were widely discussed in close connection with the traditions of behaviorism.

The Competence Portfolio became a kind of new standard for recruiting, career planning, determining the type and amount of compensation, developing and training the organization’s personnel. This became a standard that should be subject to constant correction: through questioning, monitoring, dictionaries of competency elements are refined; they got dozens or even hundreds of components. Competence portfolios were being created for various professions, career growth schemes, assessment programs, and incentive methods.

The quintessence of the above was Raven’s work “Competence in modern society – its identification, development and release” (1984), where the author gave a detailed interpretation of competence and emphasized that “types of competence” are “motivated abilities”, i.e. the whole set of cognitive, affective and volitional components of motivated behavior (Raven, 1984, p. 281).

In this work, Raven listed 37 types of competencies. In various types of identified competencies, the categories of “readiness”, “ability” are most widely represented. Moreover, conducted his research using the Edinburgh Questionnaires the author paid attention to a large number of components that make up competence.

In his opinion, being relatively independent of each other they are more

cognitive or more emotional but can be interchangeable for effective behavior. "The more such components a person involves in the process of achieving goals that are significant for himself, the higher the likelihood that he will achieve these goals" (Raven, 1984, p. 253).

The *third stage*, which began in the 90s of the last century and continues to the present, is characterized by the allocation of competence as a subject of comprehensive consideration and analysis. Researchers define blocks of competencies in relation to various areas of professional activity, the principles of systematization; study the structure of competencies.

During this period, in the world educational practice competence is considered to be one of the central concepts and a desired and predictable result of education.

McClelland's research was continued by Spencer (1993). In the book "Competence at Work: Models for Superior Performance" the author presented a fairly broad definition of the notion "competence" like a "basic quality of an individual that has a causal relationship to effective and / or best performance based on criteria in work or in other situations" (Spencer, 1993 p. 9).

By "basic quality" the scientist means that "competence is a very deep and stable part of the human personality and can determine the behavior of a person in a variety of situations and work tasks" (Spencer, 1993, p. 9). Speaking about "causal relationship", he implies that "the competence predetermines or causes certain behavior and performance". And it depends on the competence whether that "performance" will be good or bad.

According to the author, the structure of competence is determined through five

basic personality traits, such as motives, psychophysiological characteristics (or features), "I"-concept (attitudes, values), knowledge, skill.

If we use the image of an iceberg, then skills and knowledge are on the surface. They are relatively easy to develop, the deep part is motives and characteristics that are more difficult to assess and develop, part of the competence based on the "I"-concept lies somewhere in the middle, and it also undergoing changes. The paper contains semantic shades of the notion of "competence".

In the field of social psychology and acmeology a number of researchers tried to clarify the content of the notion of "competence", to determine the list of key competencies and their structural components, as well as the criteria and procedures for assessing their formation and development.

As a result, blocks of competencies were identified in relation to various areas of professional activity, the principles of systematization, and the structure of competencies was determined.

Among the fundamental provisions of psychology, it is distinguished the theoretical basis for the selection of groups of competencies:

- a person is a subject of communication, knowledge, labor;
- a person manifests itself in the system of relations to society, to other people, to oneself, to work;
- human competence has a vector of acmeological development;
- professionalism includes competencies.

As a result of the study, competence is interpreted as some internal, potential, hidden psychological neoplasms. They are

knowledge, ideas, programs (algorithms) of actions, value systems, which then manifest themselves in human competencies.

Competence is an open system that includes interacting components that are activated (updated) and enriched in activity as real vital problems, which the holder of competence faces, arise. Competence is understood as an integrated characteristic of personality traits, the result of preparing a person to perform activities in certain areas (competences).

There are various options for classifying competencies. Here is one of them:

- competencies related to oneself as a person, as a subject of life activity (competencies of health preservation, value-semantic orientation in the world, integration, citizenship, self-improvement, self-regulation, self-development, personal and subject reflection);
- competencies related to human interaction with other people (social interaction competencies, communication competencies);
- competencies related to human activity, manifested in all its types and forms (cognitive activity competencies, activity competencies, information technology competencies).

It is emphasized that the notion of “competence” includes not only cognitive and operational-technological components, but also motivational, ethical, social and behavioral aspects. Thus, as part of any competence, at least five characteristics (aspects) can be distinguished: motivational, cognitive, behavioral, value-semantic, and emotional-volitional.

If initially the problem of competence was associated with the areas of human professional activity later it penetrated into the educational sphere, since any employee enters professional activity and social reality with some educational baggage that the labor market has ceased to suit. It was necessary to translate the language of professional competencies into the language of educational competencies. So, the task of identifying the so-called basic, key competencies was solved.

One of the first steps in this direction was the UNESCO report “Education: a hidden treasure” on the current quality of education (prepared for UNESCO by the International Commission on Education for the 21st Century). The Commission considered the phenomenon of lifelong learning as based on four pillars:

- “learning to know” implies that the learner constructs his own knowledge on a daily basis by combining internal and external elements;
- “learning to do” focuses on the practical application of what has been learned;
- “learning to live” together actualizes the ability to refuse any discrimination, when everyone has equal opportunities to develop themselves, their families and their communities;
- “learning to be” emphasizes the ability to develop one’s potential, which is necessary for the individual (Delort, 1996).

Further, the Council of Europe identified 5 key competencies, trying to give a general definition of the qualities of human social life:

- 1.** Political and social competencies: the ability to accept responsibility, participate in group decision-making, resolve conflicts non-violently.

2. Competences related to life in a multicultural society: respect for others, acceptance of differences, ability to live with people of other cultures, languages, religions.

3. Competencies related to oral and written communication (importance of knowing more than one language).

4. Competences related to the increasing informatization of society: knowledge of information technologies, understanding of their application, and critical attitude to information.

5. Ability to learn throughout life.

In the context of pedagogical science, the well-known position deserves attention. So, a competence is an alienated, predetermined social requirement (norm) for the student's educational preparation, which is necessary for his high-quality productive activity in a certain area.

Educational competencies model the student's activities for his full life in the future. Educational competence is a requirement for educational preparation, expressed as a set of interrelated semantic orientations, knowledge, skills, and experience of the student's activities necessary to carry out personally and socially significant productive activities in relation to objects of reality.

It is expedient to represent all existing competencies in the form of a three-level hierarchy corresponding to the division of content in education into a general meta-subject (for all subjects), inter-subject (for a cycle of subjects and educational areas), and subject (for each academic subject).

Key competencies represent the highest level in the hierarchy of competencies, they should be possessed by every member of society and they are universal and applicable in different situations. Key

competencies have the following characteristic features:

- key competencies are multifunctional (competences are classified as key competencies if mastering them allows a person to solve various problems in everyday, professional or social life, they must be mastered to achieve various important goals and solve various complex problems in various situations);
- key competencies are meta-subject and interdisciplinary, they are applicable in various situations, not only at school, but also at work, in the family, in the political sphere, etc.;
- key competencies require significant intellectual development: abstract thinking, self-reflection, determination of one's own position, self-assessment, critical thinking, etc.;
- key competencies are multidimensional, that is, they include various mental processes and intellectual skills (analytical, critical, communicative, etc.), "know-how", as well as common sense;
- all competencies require different types of action: act autonomously and reflexively; use various tools interactively; to enter socially heterogeneous groups and function in them.

It is on the basis of these characteristics that it is necessary to form key competencies at all stages of human learning, within all subject areas.

Key competencies for general education are well known. They are the following: value-semantic, general cultural, educational and cognitive, informational, communicative, social and labor, personal self-improvement competencies.

The activity and fruitfulness of research on the problem of interest has increased significantly in the context of the Bologna process since the late 1990s.

The result of the ten-year development was summed up in the “Declaration on the European Higher Education Area”. Ministers of Education of the countries participating in the Bologna Process announced the creation of the European Higher Education Area, as envisaged in the 1999 Bologna Declaration.

The Bologna Declaration set out the vision for an attractive and internationally competitive European Higher Education Area by 2010, in which higher education institutions can perform diverse tasks in a knowledge society and in which students benefiting from mobility in accordance with fair recognition of their qualifications, will be able to choose the most appropriate educational trajectory.

This process was based on a competency-based approach. Already in the Berlin Communiqué (2003), it was recognized that it was necessary to develop a framework of comparable and compatible qualifications for national higher education systems, which would allow qualifications to be described in terms of workload, level, learning outcomes, competencies and profiles to meet diverse personal and academic needs, as well as labor market demands.

Within the framework of the Bologna process, European universities are guided by a competency-based approach, which is seen as a kind of tool for strengthening the social dialogue of higher education with the world of work, a means of deepening their cooperation and restoring mutual trust in new conditions.

According to European project TUNING, competences are a combination of characteristics (related to knowledge and

its application, to positions, skills and responsibilities) that describe the level or degree to which a certain person is able to realize these competencies.

Competences are interpreted as a single (coordinated) language for describing academic and professional profiles and levels of higher education. It is sometimes said that the language of competencies is the most adequate for describing the results of education.

The orientation of standards, curricula (educational programs) to the results of education makes qualifications comparable and transparent, which cannot be said about the content of education that differs dramatically not only between countries but also universities, even when preparing for the same specialty (subject area).

So far, a more modern methodological tool for the “Bologna” update in curricula and programs of European universities has not been found yet. The results of education, expressed in the language of competencies, according to experts, are the way to expand academic and professional recognition and mobility, to increase the comparability and compatibility of diplomas and qualifications.

Moreover, the implementation of the competency-based approach can act as an additional factor in maintaining a single educational, vocational qualification and cultural and value space.

The list of competencies is relatively easy to compile, but it is difficult to justify it methodologically. In different educational systems, there are several classifications of competencies in the field of vocational education.

What is more, it became obvious that competencies can be divided into two groups: universal (key, supra-professional) and subject-specialized (professional). In the face of accelerating change and

increasing uncertainty in today's labor markets, shared competencies are becoming increasingly important.

DISCUSSION

Scientific investigation of manuscripts devoted to development of competency-based approach in education has shown that the stated issue attracted attention of researchers. So, Khoruzha (2007) making a retrospective look at the development of the idea, focused more on the introduction of pedagogical innovations into the educational process of school but not on general process of development as it is presented in our research.

Being in alignment with the well-known findings about three stages of competency-based approach development, we added the characteristics of every stage and tried to present the development from the standpoint of modern educational paradigm.

The authors also relatively agree with Fediv et al. (2020), who, centering on the study of historical experience, determination of the stages of formation and development of methods of the competency-based approach to education for the development of personal qualities of an individual for the preparation of a modern specialist, distinguished the same three stages as in our investigation. But the researchers revealed partly other content of those stages (Chernenko, 2021).

CONCLUSIONS

Thus, education based on competencies (competency-based education) appeared

under the influence of the term "competence" proposed in relation to the theory of language. At the same time, competency-based education has three main stages in its development.

They are:

- 1) 1960-1970 characterized by the introduction of the category "competence" into the scientific apparatus. The category "competence" is applied in the theory and practice of language learning;
- 2) 1970-1990 associated with the meaningful development of the concept of "social competence". So, the application of the studied phenomenon was extended to assessing the level of professionalism in the field of management and leadership;
- 3) the 1990s to the present characterized by comprehensive consideration and analysis of the stated category. Researchers have defined blocks of competencies in relation to various areas of professional activity, the principles of systematization; are continuing to study the structure of competencies.

Since today competences can be considered as a single international language for labeling academic and professional profiles, levels and results of higher education. Due to the application of the system of competencies, the process of expanding academic and professional recognition and mobility, as well as increasing the comparability and compatibility of diplomas and qualifications has become possible.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Bowden, J. A. (2004). Competency-based learning. In S. Stein & S. Farmer (Eds.), *Connotative Learning: The Trainer's Guide to Learning Theories and Their Practical Application to Training Design* (pp. 91-100). Dubuque, IA: Kendall Hunt Publishing.
- Boychuk, Yu. D. (2013). Competence Approach as a Basis for Modernization of Modern Education. *Educational space. Global, Regional and Information Aspects*, 13, 130-135.
- Bykovska, O. V. (2007). Implementation of the competency-based approach in out-of-school education. *Extracurricular education and upbringing*, 2, 7-16.
- Chernenko, A. (2021). Information and Digital Competence as a Key Demand of Modern Ukrainian Education. *Educational Challenges*, 26(2), 38-51. <https://doi.org/10.34142/2709-7986.2021.26.2.04>
- Danik, L. V. (2016). Development of Cross-Cultural Competence in the Study of a Foreign Language in a Professional Direction. *Scientific notes of Mykola Hohol Nizhyn State University. Philological sciences*, 2, 121-124.
- Delort, J. (1996). *Education: A Hidden Treasure: Report of the International Commission on Education for the 21st Century, presented by UNESCO*. Paris.
- Fediv, V., Biryukova, T., & Olar, O., (2020). The formation of personality within the competency-based approach: historical aspects of formation. *Educational discourse*, 2(29), 1-13. <https://od.kubg.edu.ua/index.php/journal/article/view/684/587>
- Griffith, W. I., & Lim, H.-Y. (2014). Introduction to Competency-Based Language Teaching. *Journal in Competency-Based Education in Mexico*, 38(2), 75-83.
- Hafiyak, A. M., & Kononets, N. V. (2019). Author's site of the teacher as a basis of system of experts in information and communication technologies competence development. *Computer at school and family*, 3(155), 3-8.
- Holubnycha, L., Kostikova, I.I., Leiba, O., Lobzova, S., & Chornovol-Tkachenko, R. (2019). Developing Students' Intercultural Competence at the Tertiary Level. *Revista Romaneasca pentru Educatie Multidimensionala*, 11(3), 245-362. <https://doi.org/10.18662/rrem/149>
- Hurnyak, I. A. (2008). *Methods of Implementing the Competency-Based Approach in The Process of Teaching Chemistry*. Sumy, A. S. Makarenko Sumy State Pedagogical University.
- Kostikova, I., Viediernikova, T., Holubnycha, L., & Miasoiedova, S. (2019). The Competency-Based Approach to Passing First Certificate in English. *Revista Romaneasca Educatie Multidimensionala*, 11(1), 117-130. <https://doi.org/10.18662/rrem/100>
- Khodan, O. L. (2013). Competency-based approach to the training of future specialists in higher education. *Scientific Bulletin of Uzhgorod University: Series: Pedagogy. Social work*, 29, 232-235.

- Khoruzha, L. L. (2007). Competency-based approach in education: a retrospective look at the development of the idea. *Pedagogical education: theory and practice: a collection of scientific papers*, 7, 202-207.
- Lench, S., Fukuda, E., & Anderson, R. (2015). *Essential skills and dispositions: Developmental frameworks for collaboration, communication, creativity, and self-direction*. Lexington, KY: Center for Innovation in Education at the University of Kentucky. Retrieved from <https://www.inflexion.org/essential-skills-and-dispositions-developmentframeworks/>
- Levine, E. & Patrick, S. (2019). *What is competency-based education? An updated definition*. Vienna, VA: Aurora Institute. <https://files.eric.ed.gov/fulltext/ED604019.pdf>
- Luhovyi, V. I. (2009). European concept of competency-based approach in higher education and problems of its implementation in Ukraine. *Pedagogy and psychology*, 2, 13-26.
- McClelland D. (1973). Testing for Competence Rather Than for "Intelligence". *American psychologist*, January, 1-14.
- Medvedovska, T. (2011). Competency-based approach in the organization of the educational process in the system of higher education. *Humanization of education*, 7(2), 40-45.
- Nestulya, S. I (2018). Competency-based approach to the development of leadership competence of future bachelors in management at the university. *Collection of scientific works of Pavel Tychna Uman state pedagogical University*, 2, 166-176.
- Ovsienko, L. (2017). Competence approach to learning: theoretical analysis. *Pedagogical process: theory and practice*, 2 (57), 82-87.
- Pellegrino, J. W., & Hilton, M. L. (Eds.). (2012). *Education for life and work: Developing transferable knowledge and skills in the 21st century*. Washington, DC: National Academies Press. Retrieved from https://hewlett.org/wp-content/uploads/2016/08/Education_for_Life_and_Work.pdf
- Raven, J. (1984). *Competence in modern society – its identification, development and release*. London, H.K. Lewis & Co.
- Rybalko, L. (2015). Implementation of the competency-based approach to the training of future specialists in physical rehabilitation. *Pedagogical sciences*, 64, 52-58. http://nbuv.gov.ua/UJRN/pena_2015_64_12
- Spencer L, Spencer S (1993). *Competence at Work: Models for Superior Performance*. New York.
- Sturgis, C., Patrick, S., & Pittenger, P. (2011). *It's not a matter of time: Highlights from the 2011 Competency-Based Learning Summit*. https://www.inacol.org/wp-content/uploads/2015/02/iNACOL_Its_Not_A_Matter_of_Time_full_report.pdf
- Vandergrift, L. (2002). *Listening: theory and practice in modern foreign language competence*. Good practice guide. Retrieved from <https://www.llas.ac.uk/resources/gpg/67>

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

РОЗВИТОК КОМПЕТЕНТНІСНОГО ПІДХОДУ ДО НАВЧАННЯ

Стаття присвячена компетентній освіті. Розглянуто як розвиток категорії «компетентність», так і застосування компетентностей в освітній сфері. **Мета** – дослідити розвиток компетентного підходу до викладання та навчання з позицій сучасної освітньої парадигми.

Методами дослідження є аналіз і синтез пов'язаних досліджень, які використовуються для збору та представлення результатів і висновків.

Результати показали, що компетентна освіта виникла під впливом терміна «компетентність»; у її розвитку можна виділити три основні етапи: 1) 1960-1970 рр. (введення категорії «компетенція» в теорію і практику вивчення мови); 2) 1970-1990 рр. (поширення досліджуваного явища на сферу управління та лідерства); 3) з 1990-х рр. по теперішній час (комплексний розгляд та аналіз зазначеної категорії; виявлення блоків компетентностей, принципів систематизації; вивчення структури компетентностей).

Висновок: у сучасній освітній системі компетентнісний підхід є одним із центральних, оскільки наявність системи компетенцій сприяє опису академічних і професійних профілів, рівнів і результатів вищої освіти на міжнародному рівні. Більше того, завдяки застосуванню системи компетенцій процес розширення академічного та професійного визнання та мобільності, а також підвищення порівнянності та сумісності дипломів і кваліфікацій стало можливим.

КЛЮЧОВІ СЛОВА: компетентність, компетентна освіта, розвиток підходу, освіта, методичний підхід.

CITE THIS ARTICLE AS (APA style):

Holubnycha, L., Shchokina, T., Soroka, N., & Besarab, T. (2022). Development of Competency-Based Approach to Education. *Educational Challenges*, 27(2), 54-65. <https://doi.org/10.34142/2709-7986.2022.27.2.04>



<https://doi.org/10.34142/2709-7986.2022.27.2.05>

STUDENTS' INDEPENDENT WORK IN STUDYING FOREIGN LANGUAGE BASED ON LMS MOODLE

Received: 04/07/2022

Accepted: 05/08/2022

Iryna HONTARENKO



¹ Ph.D. (Education), Associate Professor, Department of Pedagogy, Foreign Philology and Translation, Simon Kuznets Kharkiv National University of Economics, Kharkiv, Ukraine.

✉ E-Mail: irynagavrikova@gmail.com

ORCID <https://orcid.org/0000-0003-0411-2520>

ABSTRACT

*This article provides an overview of the Moodle learning environment – what it includes and how it can benefit your teaching. The **purpose** of the article is to substantiate the significance and expediency of using electronic educational courses on the LMS MOODLE platform in the context of improving the quality of independent work of students while learning a foreign language.*

*The following **methods** were used: theoretical (analysis, synthesis, generalisation and systematisation of scientific theoretical and methodological literature) – in order to define the concepts of research; empirical-diagnostic (discussions, questioning, testing, pedagogical observation, expert questionnaire) to study the results of educational activities and determine the level of formation of students' independent work; pedagogical experiment (stages of launching, formation, controlling) to check the performance of the system of the corresponding didactic tools based on the LMS MOODLE platform.*

***The results are the following.** Nowadays, universities widely use the e-learning system based on the virtual learning environment Moodle (full name – Modular object-oriented dynamic learning environment). It is focused on learning technologies in cooperation and allows you to organise training in the process of solving educational tasks together, exchange knowledge. A brief analysis of the main directions of distance learning is given; experience in the development and application of electronic educational courses in English. It is concluded that the use of e-learning in the educational process increases the effectiveness of various types of independent activity of*

© Iryna HONTARENKO, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

students, self-development and formation of their professional competence. The author has developed an electronic course on the discipline "Foreign language of academic and professional communication" using LMS Moodle.

Thus, it is **concluded** that LMS Moodle has increased the effectiveness of learning a foreign language by non-linguistic students. Learning becomes oriented due to the variability and flexibility of learning the learning material at an individual pace. In addition, LMS Moodle allows solving a variety of priority tasks that modern society puts before learning and meets the requirements and capabilities of recent students. However, like any method, distance learning has its strengths and weaknesses..

KEYWORDS: LMS Moodle, Electronic Course, E-Learning, Foreign Language, Personal Learning Systems, Distance Learning.

INTRODUCTION

The intensive development of modern society requires the higher education system to train independent, competent, proactive, and ready to adapt quickly to new social and economic conditions. The current trend in the educational standards of the new generation is to reduce the hours of practice aimed at studying most disciplines and increase the hours for independent work of students. The role and time of independent work of a student in the process of mastering a foreign language require a significant increase in his productivity.

Independent work is the work of students performed during extracurricular or classroom time according to the instructions and methodological guidance of the teacher, but without his direct participation (with partial direct participation of the teacher, who leaves the leading role in the work of students). The purpose of higher education is not so much to fill the student with a certain amount of information but rather to form cognitive strategies for self-learning and self-education as the basis and component of future professional activity. Independent work of students is an essential type of academic work and plays an important role in the modern teaching

of foreign languages to students of a non-linguistic speciality. The state standard provides, as a rule, more than 50% of study hours for independent work of students (Hontarenko, 2021).

Independent work is a vital element in language learning since the insufficient number of hours allocated to contact work requires a significant amount of independent work from students. Well-organised independent work contributes to achieving educational goals and forms students' skills and abilities to independently organise educational activities, which further gives them the opportunity for self-education and self-improvement.

In teaching foreign languages, the independent work of students plays an exceptional role since the ability to communicate orally and in writing in a foreign language, to solve problems of interpersonal and intercultural interaction cannot be formed only in practical classes, without the additional independent study of a significant part of the educational material, without the ability to independently find information, critically comprehend it.

One of the principal reserves for ensuring the effectiveness of independent work is its intensification. The intensification of independent work as a component of the educational process is an increase in the productivity of the student's independent educational activity. Due to the dual nature of independent work (as a means of organisation and as a specific type of educational activity), its intensification involves the search for such forms of tasks that would ensure maximum productivity of the student's independent academic work.

Among the latest technologies used at the university for the organisation of independent work of students, it is possible to distinguish information and communication technologies that are implemented on the basis of electronic platforms. The introduction of information and communication technologies (ICT), including those implemented on the basis of electronic platforms, in the field of education allowed teachers to qualitatively change the content, methods and organisational forms of education, intensify and individualise the training of students. In recent years, research work has noted the great potential of modern technologies for more effective organisation of independent work of students (Pronczuk-Omiotek, & Skulimowski, 2018).

The theoretical and methodological base of distance learning is based on the psychological theory of activity (Zdanevych, et al., 2019; Nalyvaiko, 2020) and the concept of personal-oriented learning (Biletska, 2014), focus on formation and development of students' subjectivity, taking into account their individual abilities.

Self-organisation always implies the active position of a personality as a subject of his/her activity. An individual work of a

student means purposeful, internally motivated, structured subject activity, which consists of its acts implementation and corrections regarding process and result (Kolbina, Oleksenko, 2020).

Unsupervised work requires from those who study a high level of self-awareness, reflexivity, self-discipline, and responsibility; it should be fun for a student from the process of self-improvement and self-actualisation. So, in this determination, the most important are psychological determinants of personality work: self-regulation, self-actualisation, self-organisation, self-control, etc. (Kolbina et al., 2019)

Self-educational competence creates grounds for flexible reaction to social transformations in society and increasing the personal level of competitiveness in Ukrainian and foreign labour markets (Bodnar, 2020).

The **purpose** of the article is to substantiate the significance and expediency of using electronic educational courses on the LMS MOODLE platform in the context of improving the quality of independent work of students while learning a foreign language.

METHODOLOGY

This research uses a systematic approach to the formation and development of digital skills in university education, which involves considering objects, subjects, approaches, and methods as separate elements of the educational process. In this research, the following methods were used: theoretical (analysis, synthesis, generalisation and systematisation of scientific theoretical and methodological literature) in order to define the concepts of research; empirical-diagnostic (discussions, questioning, testing, pedagogical observation, expert questionnaire) to study the results of

educational activities and determine the level of formation of students' independent work; pedagogical experiment (stages of launching, formation, controlling) to check the performance of the system of the corresponding didactic tools based on the LMS MOODLE platform.

RESULTS

Today in Ukraine, the most common virtual learning platform is Moodle. The Moodle platform is free and available in 75 languages. In addition, it adapts easily to training requirements and is easy to use. Its pedagogical potential is invaluable for creating online communities for cooperation, training and management of educational institutions.

The use of the technologies allows students to form their skills which then help them succeed in any sphere of their activity.

Among these skills are:

- planing activity on one's own;
- taking decisions;
- making a choice;
- working in the net;
- using information technologies.

Distance courses are characterised by:

- flexibility or the ability to present the course material taking into account the preparation and abilities of students. This is achieved by creating alternative sites for obtaining more detailed or additional information on obscure topics, as well as a number of questions with hints, etc.;
- relevance or the possibility of introducing the latest pedagogical, psychological, and methodological developments;
- convenience or the opportunity to study at a convenient time, in a certain place, getting an education on the job,

- no time restrictions on studying the material;
- modularity or division of the material into separate functionally completed topics that are studied as they are mastered and correspond to the abilities of an individual student or a group as a whole;
- economic efficiency or a method of teaching that is cheaper than the traditional one due to the effective use of educational tools, simple configuration of electronic learning materials and multiple access to them;
- the possibility of simultaneous use of a large amount of educational information by any number of students;
- interactivity or active communication between the students of the group and the teacher, which significantly increases the motivation to learn and improves the assimilation of the material;
- wider opportunities for quality control of education, which include discussions, chats, the use of self-control, and the absence of psychological barriers;
- means of consulting students by the program teacher;
- means of interactive cooperation between a teacher and a student;
- the ability to quickly update the course with new information and correct errors. (Kostikova, Holubnycha, Kravchenko, Simonok, & Serheieva, 2019).

In the Moodle environment, students receive:

- 1)** access to basic materials (texts of lectures, seminars, practical, laboratory and self-development works) and additional materials (books, handbooks, manuals) for preparation and testing;
- 2)** joining groups (wiki, forum, chat, seminar, webinar);

- 3) the opportunity to get acquainted with the results of the student's distance learning course;
- 4) the ability to see the test results;
- 5) the ability to communicate with the teacher through an account, forum, or chat;
- 6) the ability to store files with registered users;
- 7) the possibility of reminders about the course activities.

The teacher is capable:

- 1) use tools to develop his/her own distance learning courses;
- 2) distribute basic materials (texts of lectures, preparation for practical/laboratory work and independent work); additional materials (books, manuals, manuals in formats: doc, html, pdf materials and via additional plugins);
- 3) supplement the course with educational elements;
- 4) carry out rapid modification of basic materials;
- 5) apply different types of tests;
- 6) perform automated tests;
- 7) automate the process of transforming the knowledge that students receive during the course and test;
- 8) add various plugins to the course that allow the teacher to use various software for distance learning (Kolbina, Oleksenko, 2019).

There are currently more than 68,000 registered Moodle sites in 235 countries. Among the most famous users of this platform are the London School of Economics, the State University of New York, the Open University of Great Britain and giant Microsoft companies. As of March 2014, 330 Moodles sites were registered in Ukraine, but only some of them provide distance learning. The number of Ukrainian universities offering Moodle training is constantly growing, for

example, Kyiv-Mohyla Academy, Kharkiv National University of Economics, Bukovina State Medical University and many others.

A period of distance learning has begun in connection with the introduction of quarantine around the world. The Simon Kuznets Kharkiv National University of Economics (KHNEU) was no exception. Its distance learning is supported by PLS (Personal Learning Systems) hosted on the Moodle platform.

PLS was established in 2009 with the aim of monitoring and coordinating the work of students, ensuring the quality content of the educational environment, equal access of participants of the educational environment to high-quality educational and methodological materials (regardless of the place of residence and form of study), creating conditions for the personalisation of learning.

As an example, I have developed a distance learning course at PLS for independent work of students in the discipline "Foreign language of academic and professional communication" for students of the direction 051.090 "Personnel Management and Labor Economics". The course is designed for 1 semester (Hontarenko, 2020).

First of all, in order to log in, the student must enter his/her username and password, which he/she is given by a particular faculty. This makes it possible to exclude non-fulfilment of independent work since the system performs automatic accounting and control.

This course has a thematic structure and includes several blocks.

The instructional block is of an organisational and methodological nature. In this block, there is a news forum (where the teacher informs students about all the events taking place in the

learning process); an explanation of the course (which specifies the goals, objectives and educational results of mastering the discipline); official documents with the discipline's work program, technological map and assessment; various educational materials and tools to optimise the interaction process between the teacher and students; resources for studying the course in the form of reference materials on grammar, vocabulary, etc.; educational, methodological and informational support of the discipline; hyperlinks to open full-text editions of educational and scientific literature, periodicals, Internet resources and other electronic educational resources intended for student self-education.

In the process of developing training modules, we adhered to the goal of organising pedagogical conditions coordinated and managed by independent work. Therefore, it was decided to include both mandatory and additional sections of the training material in each module. As part of the mandatory

topics, there are electronic educational materials for students, training in audiovisual applications. Additional topics are a glossary of terms; additional reading materials focused on materials for independent project work; additional online resources and reference materials.

Each topic of the e-learning course has a clear structure, having in its composition a set of exercises developed following the discipline program and the number of hours allotted for work and independent work on a specific topic of the course. A particular training function when learning a language should be performed by the interface of training programs (Hontarenko, 2020).

The course is divided into three blocks, each containing three topics. The first block is the marketing activity of the company. It is divided into three topics. 1.1. Marketing support. 1.2. The complex of marketing communications. 1.3. Management of product distribution channels. This block contains a glossary, grammar tasks, listening, writing, and speaking (Figure 1).

Figure 1

The first block of the course. Marketing activity of the company

Topic 1. Marketing activity of the company. 1.1. Marketing researches. 1.2. Complex of marketing communications. 1.3. Management of product distribution channels.

- Marketing Mix 4 P's. Business English Vocabulary.
- What is Digital Marketing?
- The Importance of Studying Consumer Behaviour.
- Glossary, Marketing
- Definitions
- Text "The art of persuasion"
- Text "The secret of success for online businesses"
- Writing 1
- Listening I.
- Listening II.
- GRAMMAR TENSES
- Робота на практичних заняттях за темою 1
- KEYS LISTENING

Hidden from students

+ Add an activity or resource

The structural components of each module were a text page with the following types of work – glossary, definitions, text and writing, as well as various types of quizzes with exercises for self-study.

The main types of independent work in a foreign language used in our course are:

- working with lexical material: performing lexical exercises (choosing correct answers, multiple choice questions, etc.);
- working with the text and dialogues: reading and translating professionally oriented texts and dialogues using various dictionaries;
- working with audio materials: listening to texts and situational dialogues;
- work with grammatical material: studying theoretical grammatical materials and doing grammatical exercises (AbdulWahab Mahmoud, 2021).

Thus, independent work covers all aspects of learning a foreign language and largely determines the results and quality of mastering the discipline. It is the organisation of effective independent work using LMS Moodle that provides the necessary conditions for the formation and development of linguistic and communication skills, taking into account the personal needs and characteristics of students.

Let us consider the possibility of using various tools of the course of an electronic learning environment created on the basis of LMS Moodle for organising independent work and its control. In each course topic, we have divided all the material for working with vocabulary, text and dialogue.

Almost all the exercises of our course are performed using the Quiz and Assignment tool, which allows conducting the testing procedure in the training

mode. The systematic use of educational tests in teaching a foreign language allows students to organise independent work, the purpose of which is to assimilate and consolidate the material, deepen and improve knowledge (Chekhratova et al., 2022).

It is crucial and necessary to use tests not only in control but also in the training function in the process of mastering language material and individual skills. Foreign language learning tests in PLS are designed to understand, consolidate and repeat theoretical material and improve students' skills. For example, a student goes through a vocabulary block and does exercises on it.

For educational tests, the authors of the course consider it appropriate to indicate in the settings that the time for passing the test is limited and provide students with one attempt to complete the test. Moreover, students can see their grades in the record book.

Three exercises with different tasks were selected to work with the vocabulary. The first test was conducted using a tool such as "Drag and Drop into text". In the first type of vocabulary exercises, Dragging into text questions requires students to drag text parameters from the answer bank into the question text. For example, you can ask students to complete a sentence or definition (Kazak, Bondaruk, Zabiika, Samsonenko, Ivaniha, Ignatieva, 2021).

These questions can be configured so that possible answers can be used more than once or have additional answers. The second and third types of vocabulary exercises have been done using "Select the missing words". Students must select words or phrases from the drop-down menu embedded in the question text (Fig. 2, 3).

Figure 2

An example of the text exercises «Drag to Text»

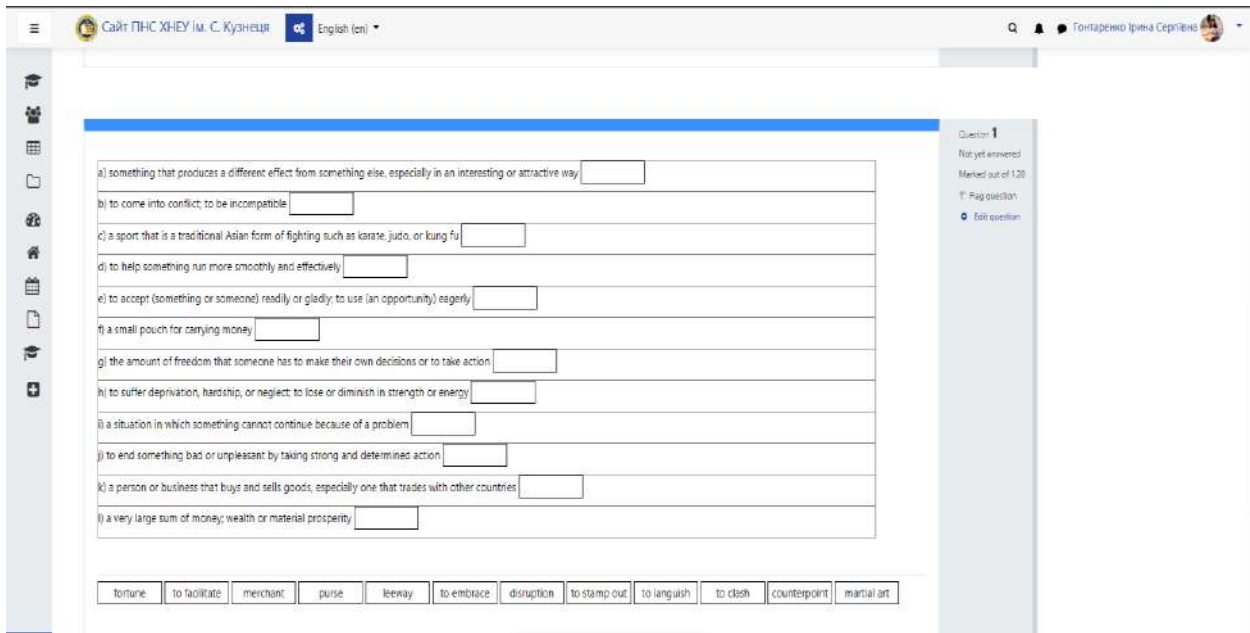
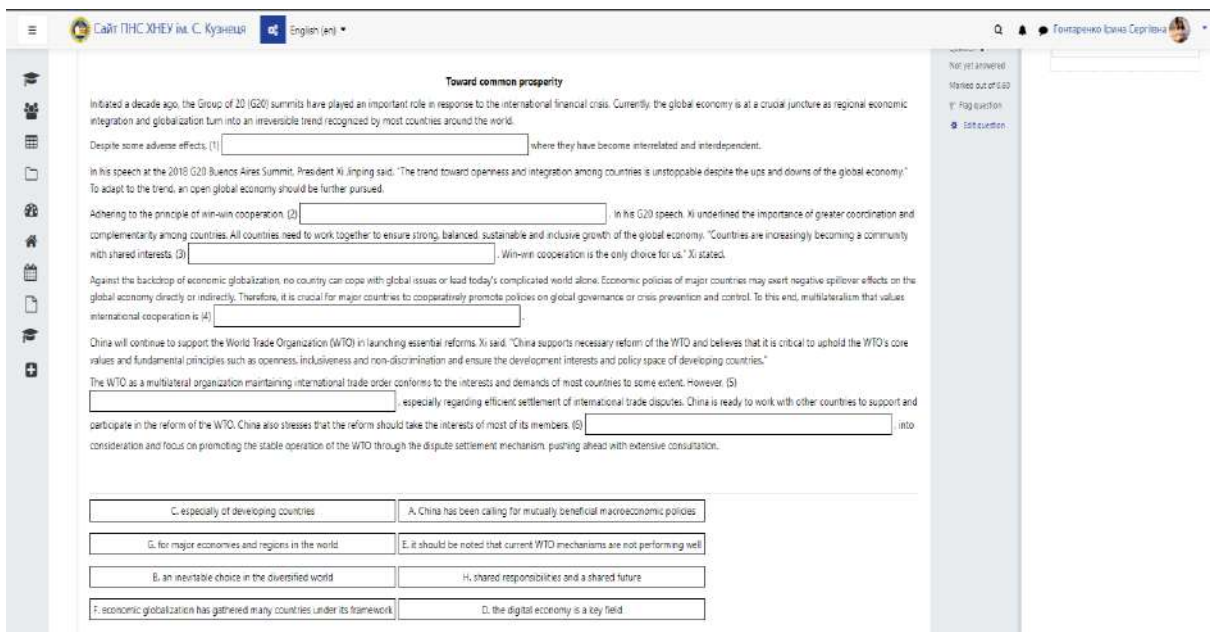


Figure 3

An example of the text exercises «Select missing words»



For tests, we have set a rating scale, the number of attempts, deadlines and a time limit. Students take the final test once in a limited period of 90 minutes. In the settings, we also have made it so that the questions are randomly selected by the computer system from all the exercises of

the module (Hontarenko, 2020). The final testing system allows students to test their knowledge at the end of the topic, and the tests developed by the teacher allow them to check the material's assimilation level quickly. A significant advantage of using the Quiz tool for a

teacher is the fast processing of results since most exercises are processed and evaluated automatically.

All results are saved in the settings of the record book, which allows you to give a fair assessment of the work of students and monitor their educational activities. In our course, we have created a record book configured in such a way that it reflects all types of work performed by students, the maximum number of points for each work and the number of points scored by the student. The record book indicates the final grade for each semester (no more than 100 points).

The assignment allows teachers to collect written or “digital” materials or files from their students. Instead of taking their homework on paper, they can do it digitally. All assignments submitted via Moodle can only be accessed by the teacher and not by other students.

There are various types of tasks in Moodle. Here, we will mainly describe the “online task”. The online assignment allows students to send a text using familiar editing tools. Teachers can evaluate these assignments online and even add online comments or changes, which will then be provided to students for further revision.

The assignment can be used to transmit and comment on any type of written document; but it can also be used to collect other types of materials from students, such as texts, essays, photographs, collages, presentation slides, audio recordings of their own voices or interviews and dialogues, etc.

You can use the Moodle glossary for various purposes: create a glossary yourself so that your students can use it (for example, for a brief introduction); ask students to work on the glossary together (where they are responsible for adding or editing entries; they can also be asked to

rate or comment on entries); make sure that you give clear recommendations on how they should create their new entry and in what order and what details should be included.

Resources are the content of the course. Lecturers may have existing content that they need to include in the course, such as websites, Word documents, etc. Any existing files are often uploaded to the course and stored on the server. While the files are on the server, they will be moved, renamed, edited or deleted. Thus, updating materials is very simple and can be done relatively quickly. The task is usually set with a deadline and a maximum score. Students are ready to upload the necessary files (Hontarenko, 2020).

System maintenance is simplified and easy to perform. Teachers and students enjoy significant rights as participants in the courses in which they participate.

Without a doubt, Moodle can be a powerful and user-friendly system, and it can effectively help teachers organise their teaching materials, improve their communication tools, and get their student interaction records when needed. However, when the Moodle system is used in a writing class, some technical difficulties and pedagogical problems cannot be ignored (Hontarenko, 2021).

We must emphasise that the Moodle platform plays an important role in helping the teaching staff to conduct mixed lessons, making education flexible, creative and accessible to everyone. Moreover, the use of Moodle platform technologies can be helpful as a model for teaching and learning foreign languages during the pandemic, and it can be useful after the pandemic period since it is an effective response to the specific

challenges of the current postmodern educational environment.

DISCUSSION

The study showed that the stages of pedagogical technology studied in this article could be effectively applied in distance learning. PLS (Personal Learning Systems) hosted on the Moodle platform offer the ability to create tests of various types. Teachers can create interactive web pages with exercises such as dragging and dropping, selecting missing words, true or false, etc. Otherwise, each section might have links to websites with many exercises. The assessment can be carried out using various types of tests. At the end of each test, each student can be assigned a grade or a score, which will be added to the overall grade for the subject. To discuss the obtained results, I must say they are very similar to my colleagues' results (Kolbina, Oleksenko, 2020) and other researchers' results (Biletska, 2014; Chekhratova, et al., 2022).

Thus, the use of the virtual learning environment Moodle for independent work of students provides a number of advantages over traditional forms and methods of organising independent work of students. Among these advantages are the implementation of the principle of individualisation of educational and professional activities; the ability to receive quick feedback; the ability to visualise educational material; variability of independent work; independence and activity. There is no doubt that the Moodle electronic environment contributes to the organisation of active independent cognitive activity of students, its optimisation, increasing the amount of information and increasing interest in learning. All of the above helps to get better results in teaching students compared to the traditional system of higher education. Furthermore, it is safe to say that the use of LMS Moodle for independent work of students contributes to the improvement of the process of training future specialists.

CONCLUSIONS

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- AbdulWahab Mahmoud, E. (2021). The effect of e-Learning Practices During the Covid-19 Pandemic on Enhancing Self-Regulated Learning Skills as Perceived by University Students. *Amazonia Investiga*, 10(39), 129-135. <https://doi.org/10.34069/AI/2021.39.03.12>
- Asieieva, Y., Sytnik, S., Babchuk, O., Heina, O., & Dementieva, K. (2022). Peculiarities of the mental state of student youth of Ukraine during quarantine restrictions. *Amazonia Investiga*, 11(50), 9-15. <https://doi.org/10.34069/AI/2022.50.02.1>

- Biletska, G. (2014). Formation of personality traits of future ecologists in the process of natural-scientific training using Moodle. *Information Technologies in Education*, 19, 45-53. <http://elar.khmnu.edu.ua/jspui/handle/123456789/2667>
- Bondar, I., Gumenyuk, T., Horban, Y., Karakoz, O., & Chaikovska, O. (2020). Distance E-Learning in the System of Professional Development of Corporation Managers: Challenges of COVID-19. *Journal of Education and E-Learning Research*, 7(4), 456-463. <https://doi.org/10.20448/journal.509.2020.74.456.463>
- Bondar, I., Humeniuk, T., Batchenko, L., Horban, Y., & Honchar, L. (2021). State Regulation of the Development of Educational and Scientific Process in Higher Education Institutions. *Journal of Management Information and Decision Sciences*, 24(2), 1-10. <https://www.abacademies.org/articles/state-regulation-of-the-development-of-educational-and-scientific-process-in-higher-education-institutions-10158.html>
- Chekhratova, O., Kovalenko, O., Petrenko, V., Pohorielova, T., & Ved, T. (2022). Developing students' autonomy and responsibility via promoting digital and media literacy in an English-language classroom. *Amazonia Investiga*, 11(52), 15-23. <https://doi.org/10.34069/AI/2022.52.04.2>
- Gumenyuk, T., Kushnarov, V., Bondar, I., Haludzina-Horobets, V., & Horban, Y. (2021). Transformation of Professional Training of Students in the Context of Education Modernization. *Innovation in the Economy and Society of the Digital Age*, 39(5), 1-10. <https://doi.org/10.25115/eea.v39i5.4779>
- Hontarenko, I. (2021). Peculiarities in Distance Learning of Foreign Language Using Moodle Platform. *Educational Challenges*, 26(2), 52-62. <https://doi.org/10.34142/2709-7986.2021.26.2.05>
- Kazak, Y., Bondaruk, Y., Zabiaka, I., Samsonenko, N., Ivaniha, O., & Ignatieva, A. (2021). Internet technologies in education: ways to learn foreign languages. *Laplace Journal*, 7(3), 385-391. <https://doi.org/10.24115/S2446-62202021731313p.385-391>
- Kolbina, T., & Oleksenko, O. (2020). Implementation of Distance Learning in Ukraine. *Educational Challenges*, 25(1), 46-54. <https://doi.org/10.34142/2709-7986.2020.25.1.04>
- Kolbina, T., Oleksenko, O., Tsykina, D., & Yevdokimova-Lysohor, L. (2019). Formation of students' communicative competence in universities of Ukraine: crosscultural aspect. *Revista Espacios*, 40 (23), 1-9. <http://www.revistaespacios.com/a19v40n23/19402309.html>
- Kolbina, T.V., & Oleksenko, O.O. (2019). Formation of Students' Creative Personality by Means of Foreign Languages. *International Journal of Education and Science*, 2(1), 7-13. <https://dx.doi.org/10.26697/ijes.2019.1.01>
- Kostikova, I., Holubnycha, L., Kravchenko, H., Simonok, V., & Serheieva, H. (2019). Cloud Computing for University Students' Language Learning. *Revista Romaneasca pentru Educatie Multidimensionala*, 11(4), 55-69. <http://dx.doi.org/10.18662/rrem/157>
- Nalyvaiko, O., Khomenko, A., Vereshchak, D., & Poliakov, D. (2021). Comparative Analysis of Distance Learning Systems in the United Arab Emirates and the United States

of America. *Educational Challenges*, 26(1), 74-85. <https://doi.org/10.34142/2709-7986.2021.26.1.07>

Pronczuk-Omiotek, A., & Skulimowski, S. P. (2018). Lifelong education in information technology – a case of Poland. *10th International Conference on Education and New Learning Technologies*, 1, 7-12. <https://doi.org/10.21125/edulearn.2018.1916>

Zdanevych L., Kruty K., Demianenko O., Pakhalchuk N., Perminova L., & Garachkovska O. (2019). E-Learning Methods in Students' Education. *International Journal of Innovative Technology and Exploring Engineering*, 8(12), 251–256. <https://doi.org/10.35940/ijitee.L3621.1081219>

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

САМОСТІЙНА РОБОТА СТУДЕНТІВ ПРИ ВИВЧЕННІ ІНОЗЕМНОЇ МОВИ З ВИКОРИСТАННЯМ LMS MOODLE

Метою статті є обґрунтування значущості та доцільності використання електронних навчальних курсів на платформі LMS MOODLE у контексті підвищення якості самостійної роботи студентів під час вивчення іноземної мови.

Використовувалися такі **методи**: теоретичний (аналіз, синтез, узагальнення та систематизація наукової теоретико-методичної літератури) з метою визначення понять дослідження; емпірико-діагностичний (бесіди, анкетування, тестування, педагогічне спостереження, експертне анкетування) для вивчення результатів навчальної діяльності та визначення рівня сформованості самостійної роботи студентів; педагогічний експеримент (етапи запуску, формування, контролю) для перевірки працездатності системи відповідних дидактичних засобів на базі платформи LMS MOODLE.

Результати. Уточнено поняття електронних навчальних курсів та їх місце в системі змішаного навчання. Висвітлено ключові особливості та можливості для інтенсифікації навчального процесу та активізації самостійної роботи студентів. Онлайн-курси англійської мови в LMS Moodle розроблено на основі аналізу наукових публікацій і досліджень, спостережень, представлено результати навчальної діяльності; розкриваються особливості їх застосування з точки зору підвищення ефективності різних видів самостійної діяльності студентів.

Викладач має унікальну можливість керувати процесом, контролювати його та адаптувати до індивідуальних особливостей учнів. Важливо, щоб використання інформаційно-комунікаційних технологій у навчанні іноземних мов було системним, оскільки процес формування навичок потребує послідовності. Подано короткий аналіз основних напрямів дистанційного навчання; досвід розробки та застосування електронних навчальних курсів англійською мовою.

Автором розроблено електронний курс з дисципліни «Іноземна мова наукового та професійного спілкування» з використанням LMS Moodle. Таким чином, зроблено висновок, що LMS Moodle підвищила ефективність

вивчення іноземної мови нелінгвістичними студентами. Навчання стає орієнтованим завдяки варіативності та гнучкості засвоєння навчального матеріалу в індивідуальному темпі. Крім того, LMS Moodle дозволяє вирішувати різноманітні пріоритетні завдання, які ставить перед навчанням сучасне суспільство, і відповідає вимогам і можливостям студентів.

Зроблено **ВИСНОВОК**, що використання електронного навчання в навчальному процесі підвищує ефективність різноманітних видів самостійної діяльності студентів, саморозвитку та формування їхньої професійної компетентності.

КЛЮЧОВІ СЛОВА: LMS Moodle, електронний курс, e-learning, іноземна мова, персональна навчальна система, дистанційне навчання.

CITE THIS ARTICLE AS (APA style):

Hontarenko, I. (2022). Students' Independent Work in Studying Foreign Language based on LMS MOODLE. *Educational Challenges*, 27(2), 66-78. <https://doi.org/10.34142/2709-7986.2022.27.2.05>



<https://doi.org/10.34142/2709-7986.2022.27.2.06>

SOFT SKILLS DEVELOPMENT IN FUTURE PRIMARY SCHOOL TEACHER'S TRAINING

Received: 30/08/2022

Accepted: 30/09/2022

Nataliia HRONA¹, Olena VYSHNYK², & Iryna PINCHUK³



¹ Doctor of Sciences (Pedagogy), Ph.D. in Pedagogy, Associate Professor, Teacher of Higher Category, Methodist-Teacher, Communal Establishment "Ivan Franko Pryluky Humanitarian and Pedagogical Applied College" of Chernihiv Regional Council.

✉ E-Mail: natashagrana@ukr.net

ORCID <https://orcid.org/0000-0003-2578-2865>



² Ph.D. in Pedagogy, Associate Professor, Primary Education Theory and Methods Chair, Oleksandr Dovzhenko Hlukhiv National Pedagogical University, Hlukhiv, Sumy Region, Ukraine.

✉ E-Mail: olenvyshnyk84@gmail.com

ORCID <https://orcid.org/0000-0002-0854-0330>



³ Doctor of Sciences (Pedagogy), Ph.D. in Pedagogy, Associate Professor, Primary Education Theory and Methods Chair, Oleksandr Dovzhenko Hlukhiv National Pedagogical University, Hlukhiv, Sumy Region, Ukraine.

✉ E-Mail: pinchukiryana78@gmail.com

ORCID <https://orcid.org/0000-0002-1376-3977>

ABSTRACT

The article deals with the importance of having soft skills nowadays. Through the analysis and synthesis of scientific and methodical sources, it was found that soft skills are flexible, sometimes non-special, acme competencies for the successful performance of professional duties.

© Nataliia HRONA, Olena VYSHNYK, & Iryna PINCHUK, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

The **purpose** of the article is to reveal the content and the conditions for soft skill development in the process of training future primary school teachers, in particular, during the Ukrainian language teaching methods.

To reach the purpose of the article, a set of research **methods** was used: theoretical: analysis of linguistic, educational, psychological, and methodical literature on the problems; synthesis, generalization, comparison; studying the work experience of higher education institutions teachers, defining the conceptual apparatus of research; empirical: observation and analysis of pedagogical phenomena and processes, collective and individual conversations with the aim of identifying the main contradictions and shortcomings in the content, teaching methods to identify the problems of soft skills formation in the process of learning the Ukrainian language teaching methods.

Results. It was determined that the term “soft skills” in the context of training a future primary school teacher is considered as a set of personal skills aimed at developing successful, productive learning of primary school pupils, the ability to communicate effectively with direct participants during the educational process (pupils) and indirect participants (colleagues, administration, pupils’ parents).

It has been proven that the new communicative environment enables the productive organization of the educational process participants, encourages creativity by means of developing the potential of methodological techniques, and operations in the form of various documents (working materials) aimed at obtaining the information with a powerful didactic resource for studying professional courses. The analysis of the professional standard “Teacher of the primary school of a general secondary education institution”, which was developed on the basis of the working functions of a teacher and involves a review of attitudes towards professional qualities and changes in stereotypes of the professional development, made it possible to identify a number of soft skills that must be formed in accordance with teacher’s working functions.

It has been found that soft skills include leadership qualities and the ability to work in a team, the ability to teach and negotiate, set and complete tasks, time management, purposefulness, effective communication skills, presentation skills, stress resistance, creativity and analytical abilities.

The attention is focused on the communicative aspect of soft skills. An employee with strong interpersonal communication skills can formulate his needs and expectations from the team and environment and listen carefully to others. She/he should communicate with the participants of the educational process in such a way that everyone has the feeling that he was heard and understood, and even the refusal was done professionally, without leaving a residue of indifference and hostility. The exercises and tasks for forming soft skills during the course of Ukrainian language teaching methods are offered.

Conclusions. The necessity of updating the content of educational programs and courses of the specialty 013 “Primary education” to further develop future

primary school teachers' soft skills is proven since their professional and personal success depends on soft skills formation.

KEYWORDS: *Communication, Media Text, Media Education, Primary School Teacher, Soft Skills, The Ukrainian Language Teaching Methods.*

INTRODUCTION

Today, such new criteria have been identified in the training of future primary school teachers as the need for nationally conscious citizens with an active position, seeking to innovation and education throughout life, able to think critically and communicate effectively in society, showing a high level of communication.

Employers define "soft skills" as the leading key skills in the context of global information digitalization. Thus, in 2016, at the World Economic Forum in Davos, the report "The Future of Jobs" named a list of universal skills ("soft skills") that will be most in demand in the labour market in the next 20-30 years and will become the basis for the formation of a new generation of professionals (Koval, 2015).

Recent labour market research shows that employers' interest in soft skills has increased, in particular, 93% of entrepreneurs from 16 European countries consider them equally important as professional knowledge and skills. That is why it is necessary to form them in the course of professional training, in particular, of primary school teachers.

Under the conditions of modern requirements, graduates of higher educational institutions must acquire deep theoretical knowledge, develop proven skills and abilities, acquire creative qualities, improve critical thinking, form a value attitude towards future professional activity, and can communicate productively (Belmaz et al., 2019). Nowadays, Ukrainian schools need qualified specialists with universal teacher competencies, which are called soft skills

or sometimes they are also called human or unified.

The essence of the conceptual content of "soft skills" has been clarified by many researchers (Bolstad, 2017; Dweck, 2008; Abdullayev, & Rebar, 2021 etc.). The scientists examine future-oriented needs and requirements for training, professional activity, changing stereotypes, teaching to perform tasks of various complexity, and achieving professional success. Taking into account the social and pedagogical significance of the Ukrainian language for the forming and developing of a primary school pupil's personality, the Ukrainian language teaching methods play an important role in the training of intending primary school teachers (Snape, 2017).

Teachers must not only possess the set of requirements for the pupils' training, in particular, knowledge, abilities, skills and attitudes, but understand the degree of mastering them, so that already formed pupils' skills and abilities, personal values become theirs, but also change accordingly to the new conditions for providing the educational services (the global coronavirus pandemic, the full-scale invasion of the Russian army into Ukraine, which has changed not only the content, but also the form of educational activity, when education is under the conditions of risk, aggression, and moral stress, adds urgency to this problem).

The purpose of the article is to reveal the content and the conditions for soft skill development in the process of training future primary school teachers, in particular, during the Ukrainian language teaching methods.

To achieve the purpose, the following tasks were put: to carry out a definitive characterization of the concept of “soft skills” and determine its components in the context of the professional standard “Teacher of the primary school of a general secondary education institution”; to analyze the main problems of forming soft skills in the process of teaching the course of the Ukrainian language teaching methods; to give the examples of tasks for forming students’ soft skills.

METHODOLOGY

To achieve the purpose and solve the tasks, a set of research methods was applied: theoretical: analysis of linguistic, educational, psychological, and methodical literature on the problems; synthesis, generalization, comparison; studying the work experience of higher education institutions teachers, defining the conceptual apparatus of research; empirical: observation and analysis of pedagogical phenomena and processes, collective and individual conversations with the aim of identifying the main contradictions and shortcomings in the content, teaching methods to identify the problems of soft skills formation in the process of learning the Ukrainian language teaching methods.

RESULTS

The concept of forming soft skills has become a component of the global labor market in the most diverse spheres of the economy and society. For the most part, soft skills are identified with employability skills (skills for employment), people skills (skills for communicating with people), non-professional skills, key skills (basic 32 skills), skills for social progress (skills for social development), life skills. The vast majority of scientists have reached a consensus regarding the basic elements of soft skills.

These are knowledge, abilities and skills: communication, the ability to think critically and structure, to solve problems, to work in a team; to learn throughout life and manage information, entrepreneurship, ethics, morality and professionalism, leadership, interpersonal and intrapersonal skills, responsibility; decency / reliability, creativity, computer literacy, objective self-assessment, the ability to manage conflicts, to negotiate, the desire to learn; cultural awareness, empathy, time management, sociality, self-esteem (Robles, 2012; Snape, 2017). Instead, T. Hoholkina and A. Pavlenko (2020) interpret soft skills as a set of non-specialized, important universal skills responsible for successful participation in productive activities, which are cross-cutting skills, that is, not related to a specific subject field. This approach focuses attention on the social significance of such skills.

According to M. Robles (2012), soft skills are skills acquired thanks to additional education and personal life experience to use one’s own development in professional activities. This indicates a comprehensive approach to the characterization of soft skills. T. Kozhushkina (2018) examines the psychological component of soft skills and attributes them “to social skills: the ability to persuade, to find an approach to communicate with people, to lead, to carry out interpersonal communication, to negotiate processes, to work in a team, to implement personal development, to manage time, to be erudite, creative, etc.” (Kozhushkina, 2018: 78).

We note the similarity in the content of the concept in the research of N. Dluhunovych (2014), who also defines “soft skills” as social skills that make it possible to establish interaction with different age categories of people.

I. Tkachuk and N. Sosnovenko (2019) believe soft skills are communicative and managerial talents, which, according to the authors, include “the ability to persuade, to lead, to manage, to make presentations, to find the right approach to people, the ability to resolve conflict situations, to master the art of oratory”. In other words, they mean these talents not as the qualities and skills defined by the professional profile of a specialist, but those that can be defined as universal.

The contextual analysis of various scientific sources makes it possible to dwell on such a semanticization of the term “soft skills” in the context of training a future primary school teacher - a set of personal skills aimed at the successful, productive teaching of primary school pupils, the ability to communicate effectively with direct participants in the educational process (pupils) and indirect (colleagues, administration, pupils' parents).

There is no unified list, just like the classification of soft skills. We assume that the presence of soft skills and competencies forms the social competence of intending specialists, develops the ability to mobilize in a specific social and professional situation, develops sociability, which accumulates in the choice of words, able to produce one's expression as clearly as possible, filling it with a meaningful load. Considering that the language teaching methodology makes it possible to work with productive linguo-methodological material, we get an environment for the effective formation of soft skills (Pashko, & Pinchuk, 2020).

Soft skill is a sociological term that refers to a person's emotional intelligence quotient, a set of personality traits, social skills, communication skills, personal habits, friendliness, and optimism. Data from the content analysis of the interpretation of the term made it possible to somaticize

soft skills as flexible, sometimes non-specialist, acme competencies (acme is the top, peak, the highest degree of something, flourishing) for the successful performance of professional duties (Sapozhnykov, 2020).

The means for the implementation of these elements are presented in the professional standard “Teacher of a primary school of a general secondary education institution” (2020), which was developed on the basis of the labour functions of a teacher and provides for a review of attitudes towards professional qualities and changes in stereotypes of the development of his professional competence.

The analysis of the document content made it possible to identify a number of soft skills that must be formed in accordance with the work functions of a teacher: “Planning and implementation of the educational process”, “Evaluation of the results of primary school teachers' work in general secondary education institution”, “Generalization of the own pedagogical experience and its presentation to the pedagogical community”, “Providing methodical assistance to colleagues in matters of training, development, education and socialization of primary school pupils of a general secondary education institution”, “Conducting pedagogical research”, “Reflection and professional self-development”, “Creating the educational environment”, “Ensuring and supporting learning, education and development of pupils in an educational environment and family”.

The survey of lecturers and teachers showed that the main soft skills are the following: the ability to persuade, to work in a team, resolve conflicts, adaptability, flexibility, time management (optimal

organization of time), and responsibility (Pinchuk, 2020).

All functions found their implementation during the study of the Ukrainian language teaching methods by future specialists. Therefore, during seminars, practical and laboratory classes, and the organization of students' individual works, we must focus on these requests and respond flexibly, changing both the content and the process of students acquiring relevant knowledge, gaining professional experience, and changing value orientations regarding the creation of a new educational environment (Hrona, 2021, p. 225).

The principal skills are communication skills. An employee with strong interpersonal communication skills can clearly formulate his needs, and expectations of the team and the environment, listen carefully to others (Tkachuk, & Sosnovenko, 2019). He must communicate with the participants of the educational process in such a way that everyone has the feeling that he was heard and understood, and even the refusal was done professionally, without leaving a residue of indifference and hostility.

For example, it is not customary to say "No" in China. From childhood, they are taught various methods to tactfully "refuse". Therefore, when a Chinese refuses, a person always remains satisfied, as if he was actually told "Yes". The survey of teachers and students made it possible to come to the conclusion that 46% of respondents consider it the most difficult skill to speak in front of an audience, 24% – to criticize reasonably, and 30% – to draw attention as a quality interlocutor. Therefore, the communicative aspect of the formation of soft skills is leading.

An effective means of forming soft skills among students during the practical, seminar and laboratory classes on the Ukrainian language teaching methods is consideration of problematic issues that encourage thinking, drawing conclusions, and comparing. For example, studying the topic "Methods of studying the "Text" section":

- *What is the practical significance of the ability to divide the text into paragraphs, to determine the beginning, the main part and the ending of the text?*
- *What are the means of communication between parts of the text in the language? Why introduce them to primary school pupils?*
- *Is it possible to consider the formation of primary school pupils' text-creating skills as a condition for effective composition-creating activity at the next levels of education?*
- *Is writing essay competence one of the ways to develop pupils' creative abilities?*
- *What is the role of teaching to create reasoning compositions for the developing primary school pupils' communicative abilities?*
- *Do you see the need to connect the work of teaching the creation of descriptive essays with the choice of style and genre in primary school? Why?*
- *Do you think that the preparatory stage for learning to create written reasoning essays can be started already in the first grade? Justify your answer.*
- *How do you see the difference between explanatory reasoning and evidentiary reasoning? Do you think it is appropriate to introduce primary school pupils to this division of reasoning texts?*

- *Is it possible to assume that children learn to relate the title and content of the work, starting from literacy lessons?*
- *Why do you think it is important to divide texts into thematic groups when learning to create descriptive essays: 1) portrait description of a person (appearance, character); 2) description of an animal, or plant; 3) description of an inanimate object; 4) description of the interior; 5) description of natural phenomena; 6) landscape description? Which thematic groups should start studying, and which ones should be started later? Why?*

We offer the content of tasks and exercises for the purpose of forming soft skills:

- Create a “bank” of case tasks for primary school pupils. Let’s consider the examples of such tasks for 4th form pupils.

Task 1. Describe the appearance of the bird to your friends who could not come to the excursion. Describe the bird (nightingale) in such a way as to convey its beauty to arouse the admiration of listeners for its singing skill.

Task 2. Write a letter about your city (town, village) to your friend.

Task 3. Imagine that your classmates are going to the local history museum on Sunday. You should: a) announce the excursion during the educational lesson, b) tell your parents about it. How are the statements different? Write your ideas.

Task 4. Create an essay based on the storytelling method at the level of a primary school pupil. For example: In the famous Ukrainian folk tale “Dumpling” (“Kolobok”), the fox outwitted the main character and ate it. What story could Dumpling (Kolobok) tell in order to distract the attention of the Fox and not fall into a trap?

The adoption of the lifelong education concept, the philosophy of open education, distance learning and externships require students and teachers to have special skills in working with information, understanding the role and importance of the world of media in the professional and cultural development of an individual - aspects of the forming soft skills (Drushlyak et al., 2022; Kozhushkina, 2018).

Considering this, the educational process in higher education institutions must be aimed at updating the content of professionally oriented courses, teamwork, and pedagogical practice by ensuring the integration of the content of media education with professional courses, mastering students’ culture of research work with media and text; creating and using by students of their own media educational product in the process of formal and informal education, and this will contribute to the effective training of future specialists (Hreb, & Hrona, 2021).

For this purpose, during practical and laboratory classes, we offer students the following tasks:

- Create some tasks for distinguishing between fact and judgment based on the material of the text from the primary school textbook “Literary Reading”.
- Formulate thesis for a short motivational speech in front of pupils regarding the need to acquire critical information perception skills (select and indicate the age of the audience).
- Develop a “Method of Paradoxes” to combat the negatives of clip thinking? (Mykhailo Kazinik, a world-renowned professor and teacher, in his practice used the method of “paradoxes”, which develops analytical abilities and critical thinking; a paradox emerges from a

contradiction; a convenient exercise that eradicates the consumerist attitude to information and teaches reflection). We offer samples of “paradoxes”:

- The best things in life are free.
- The more choice, the less choice. “There was nothing like this in my childhood,” your grandmother told you more than once. Yes, now it’s a great choice. However, it happens that when you come to a supermarket, your eyes run away from the abundance. And it all ends with the fact that you cannot decide on a choice and leave with nothing.
- The more you try to control the situation, the less you succeed. Unfortunately, many things are out of control, so the best solution would be to control yourself.

We found out that it is difficult for students to express their opinions quickly and sufficiently comprehensively, and to choose convincing arguments. Sometimes, claiming absolute knowledge, they cover their ignorance with self-confident, domineering intonation. The ability to summarize information, grasp complex ideas, feelings and ideas and formulate them in a few words is not always manifested, individual statements are reflective in nature (Pinchuk, 2020).

It proves that it is necessary to intensify the work to overcome these problems, and to pay special attention to the issues of further development of soft skills, which depend on professional and personal success, updating the content of educational programs.

DISCUSSION

The strategic purpose of the modern school is obvious: improving the quality and effectiveness of education and ensuring the comprehensive

development of the pupil’s personality. It can be achieved through the institution’s continuous innovative development, primarily through the systematic using modern approaches in the educational process. We share a view on this new educational strategy, which involves the development of intending primary school teachers’ soft skills. After all, students get the opportunity to delve deeper into the structure of complex didactic processes and objects, to reach almost any degree of their detailing.

The practical aspect of the work showed how to build an educational process so that students understood the necessity of the studied material and could immediately apply the acquired knowledge in practice. We have proven that the intensive exchange of information between the participants of the educational process contributes to the student’s educational development, the acquisition of thorough methodical knowledge, skills, and is a powerful incentive for self-education, personal professional growth and creative development.

CONCLUSIONS

It was established that the educational process should be structured in such a way that the student understands the necessity of the studied material and can immediately apply the acquired knowledge in practice. Each subsequent lesson will be effective and accessible, more flexible, learning will be formed according to the principle of “growth”. This is how it is possible to qualitatively develop soft skills in classes on the Ukrainian language teaching methods, emphasizing the students’ ability for interpersonal interactions and the expression of personal characteristics.

The components of soft skills are the ability to think critically, namely: analyze the existing situation, generalize and change behavior in accordance with the environment, the ability to feel,

understand and analyze the feelings and emotions of other people which will be the vector of our further research in the context of learning the Ukrainian language teaching methods.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Belmaz, Ya. M., Serheieva, I. S., & Sapozhnykov, S.V. (2019). Instrumenty efektyvnoyi komunikatsiyi dlya vykladachiv inozemnykh mov pedahohichnoho ZVO [Tools of Effective Communication for Teachers of Foreign Languages of Higher Pedagogical Educational Establishments]. *Zbirnyk naukovykh prats «Pedahohika ta psykholohiya» Pedahohichni nauky*, 62, 3 – 14 [in Ukrainian].
- Hoholkyna, T., & Pavlenko, A. (2011, August 25). *Navychky v myakomu varianti – tezh peredumova dlya uspiyku* [Soft Skills are also a Prerequisite for Success]. Deutsche Welle. <https://www.dw.com/uk/навички-в-мякому-варіанті-теж-передумова-для-успіху-15343547> [in Ukrainian].
- Hreb, M. M., & Hrona, N. V. (2021). Informatsiyno-komunikatsiyini tekhnolohiyi yak zasib formuvannya linhvodydaktychnoyi kompetentnosti maybutnikh uchyteliv pochatkovykh klasiv. [Information and Communication Technologies as a Means of Forming Linguistic Didactic Competence of Intending Primary School Teachers]. *Informatsiyini tekhnolohiyi i zasoby navchannya* [Information technologies and teaching aids], 82(2), 109-126. <https://doi.org/10.33407/itlt.v82i2.3288> [in Ukrainian].
- Hrona, N. V. (2021). Hnuchki uminnya (SOFT SKILLS) u kursi vyvchennya metodyky navchannya ukrayinskoyi movy: zmist, formuvannya, determinatsiya [Soft skills in the Course of Studying the Ukrainian Language Teaching Methods: Content, Formation, Determination]. *Naukovi zapysky Berdyanskoho derzhavnoho pedahohichnoho universytetu. Pedahohichni nauky*, [Scientific notes of the Berdyansk State Pedagogical University, Pedagogical Sciences], 2, 218-227. https://elibrary.kubg.edu.ua/id/eprint/39061/1/I_Sukhopara_PIREIMSUC_2021.pdf [in Ukrainian].
- Dlunovych, N. A. (2014). Soft skills yak neobkhidna skladova pidhotovky IT fakhivtsiv. [Soft Skills as a Necessary Component of the Training of IT Specialists]. *Visnyk Khmelnytskoho natsionalnoho universytetu* [Bulletin of the Khmelnytskyi National University], 6(219). 239–242. URL: http://journals.khnu.km.ua/vestnik/pdf/tech/2014_6/47.pdf [in Ukrainian].
- Drushlyak, M., Semenoh, O., Hrona, N., Ponomarenko, N., & Semenikhina, O. (2022). Typolohiya internet-resursiv dlya rozvytku infomediynoyi hramotnosti molodi.

[Typology of Internet Resources for the Development of Information Media Literacy of Young People]. *Informatsiyini tekhnolohiyi i zasoby navchannya* [Information technologies and teaching aids], 88(2), 1-11. URL: <https://journal.iitta.gov.ua/index.php/itlt/article/view/4786> [in Ukrainian].

- Koval, K. O. (2015). Rozvytok «soft skills» u studentiv – ody z vazhlyvishykh chynnykiv pratsevashtuvannya. [The Development of “Soft Skills” among Students is One of the Most Important Factors of Employment]. *Visnyk Vinnytskoho politekhnichnoho universytetu* [Bulletin of the Vinnytsia Polytechnic University], 2, 162-167. <https://visnyk.vntu.edu.ua/index.php/visnyk/article/view/827> [in Ukrainian].
- Kozhushkina, T. L. (2018). Mizhosobystisna vzayemodiya yak skladova chastyna «soft skills» studentiv pedahohichnoho koledzhu. [Interpersonal interaction as a component of “soft skills” of the pedagogical college students]. *Naukovyy chasopys natsionalnoho pedahohichnoho universytetu imeni M.P. Drahomanova* [Scientific journal of the National Pedagogical University named after M.P. Drahomanov], 5(63), 77–81. <http://www.chasopys.ps.npu.kiev.ua/archive/63-2018/20.pdf> [in Ukrainian].
- Profesiynyi standart za profesiyamy «Vchytel pochatkovykh klasiv zakladu zahalnoyi serednoyi osvity», «Vchytel zakladu zahalnoyi serednoyi osvity», «Vchytel z pochatkovoyi osvity (z dyplomom molodshoho spetsialista)» (2020). [Professional standard for the professions “Teacher of primary classes of a general secondary education institution”, “Teacher of a general secondary education institution”, “Primary education teacher (with junior specialist diploma)”]: zatverdzhenny Nakazom Ministerstva rozvytku ekonomiky, torhivli ta sil'skoho hospodarstva Ukrayiny № 2736 від 23.12.2020 р. [approved by the Order of the Ministry of Economic Development, Trade and Agriculture of Ukraine]. URL: <https://www.me.gov.ua/Documents/Detail?lang=uk-UA&id=22469103-4e36-4d41-b1bf-288338b3c7fa&title=RestrProfesiinikhStandartiv> [in Ukrainian].
- Tkachuk, I. I., & Sosnovenko, N. V. (2019). Rozvytok «Miaki navychky» u studentiv koledzhiv. [Development of “Soft Skills” in college students]. *Profesiyna osvita* [Professional education], 3(84), 16–18. https://lib.iitta.gov.ua/717748/1/Tkachuk_Sosnovenko_soft%20skills_2019_16-18.pdf [in Ukrainian].
- Bolstad, R. (2017). *Playing for peace: Complex role-play gaming in high school history: a case study*. NZCER. <http://dx.doi.org/10.13140/RG.2.2.31785.08806>
- Dweck, C. S. (2008). *Mindset: the new psychology of success*. Ballantine Books.
- Hreb, M., Hrona, N., Chumak, V., Vyshnyk, O., & Hreb, V. (2020). Speech Competence of Primary School Students: Cognitive Approach. *Journal of History Culture and Art Research*, 9(2), 165-174. <https://doi.org/10.7596/taksad.v9i2.2437>
- Abdullayev, A., Rebar, I., Bielova, O., Gurtova, T., Tsovk, L., Ponomarev, S. ... Stadnychenko, K. (2021). *Modern Education, Training and Upbringing*. International Science Group. Boston: Primedia eLaunch. <https://doi.org/10.46299/ISG.2021.MONO.PED.I>
- Robles, M. M. (2012). Executive Perceptions of the Top 10 soft skills needed in today's

workplace. *Business Communication Quarterly*, 75(4), 453–465.

- Snape, P. (2017). Enduring Learning: Integrating 21st Soft Skills through Technology Education. *Design and Technology Education*, 22(3). <https://ojs.lboro.ac.uk/DATE/article/view/2222/2585>
- Pashko, & A., Pinchuk, I. (2020). Methods of Classifying Foreign Language Communicative Competence Using on the Example of Intending Primary School Teachers. In Babichev S., Lytvynenko V., Wójcik W., Vysheymyrskaya S. (Eds.) *Lecture Notes in Computational Intelligence and Decision Making. ISDMCI 2020. Advances in Intelligent Systems and Computing*, vol 1246 (pp. 98–113). Springer, Cham. https://doi.org/10.1007/978-3-030-54215-3_7
- Pinchuk, I. (2020). Analysis of the current state of forming intending primary school teachers' foreign language communicative competence in the process of professional training. *Zhytomyr Ivan Franko State University Journal. Pedagogical Sciences*, 1(100), 61–71. <http://eprints.zu.edu.ua/31319/1/9.pdf>
- Rakhmanina, A., Pinchuk, I., Vyshnyk, O., Tryfonova, O., Koycheva, T., Sydorko, V., & Iliencko, O. (2022). The Usage of Robotics as an Element of STEM Education in the Educational Process. *IJCSNS International Journal of Computer Science and Network Security*, 22(5), 645–651. <https://doi.org/10.22937/IJCSNS.2022.22.5.90>
- Sapozhnykov, S. V. (2020). Teoretychni ta prykladni aspekty formuvannya kultury profesiynoyi komunikatsiyi maybutnikh fakhivtsiv [Theoretical and Applied Aspects of Forming the Culture of Professional Communication of Intending Specialists]. *Zbirnyk naukovykh prats «Pedahohika ta psykholohiya» Pedahohichni nauky*, 63, 142–150. <http://doi.org/10.34142/2312-2471.2020.63.15> [in Ukrainian].

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

ФОРМУВАННЯ ГНУЧКИХ НАВИЧОК У ПРОЦЕСІ ПІДГОТОВКИ МАЙБУТНЬОГО ВЧИТЕЛЯ ПОЧАТКОВОЇ ШКОЛИ

У статті обґрунтовано значущість гнучких навичок. Шляхом аналізу і синтезу науково-методичних джерел з'ясовано, що гнучкі навички – це змінні, інколи поза фахові, акме компетентності (акме — вершина, пік, вищий ступінь чого-небудь, розквіт) для успішного виконання професійних обов'язків.

Мета статті – розкрити зміст, умови формування гнучких навичок у процесі підготовки майбутнього вчителя початкової школи, зокрема, методики навчання української мови.

У ході дослідження було використано комплекс **методів дослідження**, що містив теоретичні (аналіз літератури, синтез, узагальнення, порівняння) й емпіричні (спостереження, бесіди тощо) методи.

Результати. Визначено, що термін «гнучкі навички» у контексті підготовки майбутнього вчителя початкових класів – комплекс особистісних навичок, що відповідають за успішне, продуктивне навчання учнів молодшого шкільного віку, здатність ефективно комунікувати з безпосередніми

учасниками освітнього процесу (учні) й опосередкованими (колеги, адміністрація, батьки учнів).

Доведено, що нове комунікативне середовище уможлиблює продуктивну організацію учасників освітнього процесу, спонукає до творчості за допомогою розвивального потенціалу методичних і технічних прийомів, операцій у формі різноманітних документів (робочих матеріалів), спрямованих на отримання інформації, з потужним дидактичним ресурсом для вивчення фахових дисциплін. Аналіз професійного стандарту «Вчитель початкових класів закладу загальної середньої освіти», який розроблений на основі трудових функцій педагога, і передбачає перегляд ставлення до фахових якостей та зміни стереотипів розвитку його професійної, дав можливість виявити низку гнучких навичок, які мають бути сформовані відповідно до трудових функцій педагога.

З'ясовано, що до них відносять лідерські якості та вміння працювати в команді, вміння навчати та проводити переговори, ставити та виконувати поставлені завдання, управління часом, цілеспрямованість, навички ефективної комунікації, презентаційність, стресостійкість, креативність, творчий підхід до роботи та аналітичні здібності.

Акцентовано увагу на комунікативному аспекті гнучких навичок. Співробітник з потужними навичками міжособистісного спілкування вміє чітко сформулювати свої потреби, очікування до команди й оточення, уважно вислухати, як їх формулюють інші. Він має так комунікувати з учасниками освітнього процесу, щоб у кожного залишилося відчуття, що він був почутий та зрозумілий, і навіть відмова була зроблена професійно, не залишаючи осаду байдужості й неприязні. Запропоновано вправи і завдання для формування гнучких навичок під час вивчення методики навчання української мови.

Висновки. Доведено, що є потреба в оновленні змісту освітніх програм та контенту дисциплін спеціальності 013 «Початкова освіта» з метою подальшого розвитку гнучких навичок майбутніх учителів початкової школи, оскільки від сформованості таких навичок залежить їхній професійний та особистісний успіх.

КЛЮЧОВІ СЛОВА: комунікація, медіа текст, медіа освіта, учитель початкових класів, гнучкі навички, методика навчання української мови.

CITE THIS ARTICLE AS (APA style):

Hrona, N., Vyshnyk, O., & Pinchuk, I. (2022). Soft Skills Development in Future Primary School Teacher's Training. *Educational Challenges*, 27(2), 79-90. <https://doi.org/10.34142/2709-7986.2022.27.2.06>



<https://doi.org/10.34142/2709-7986.2022.27.2.07>

E-LEARNING TEACHING: SUPPORTIVE ONLINE COURSE 'ENGLISH FASTPASS'

Received: 01/05/2022

Accepted: 01/06/2022

Ilona KOSTIKOVA¹, & Svitlana MIASOIEDOVA²



¹ Doctor of Sciences in Education, Ph.D. in Education, Ph.D. in Philology, Full Professor, Head of the Department of Theory and Practice of the English Language, H.S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.

✉ E-Mail: ilonakostikova@gmail.com

ORCID <https://orcid.org/0000-0001-5894-4846>



² Ph.D. in Philology, Associate Professor, Head of the Online Course 'English Fastpass', Thessaloniki, Greece.

✉ E-Mail: lane.eng1223@gmail.com

ORCID <https://orcid.org/0000-0002-1754-5635>

ABSTRACT

The **aim** of this paper is to prove the hypothesis that in order to cope with the adversities and hardships and meet the demands of the wartime and pandemic challenges, a complex of tools and techniques has to be applied including new teaching strategies with the use of multimedia, mobile applications and employing learning possibilities of social networking sites, Google classroom tools and other instruments with online course "English Fastpass".

Methodology. In this research theoretical, empirical and statistical methods are used. Theoretical methods (analysis and synthesis) serve to analyze opportunities, advantages and disadvantages of social media as a new tool of teaching. Empirical ones (observation, testing, pedagogical experiment) provide conducting the experiment itself. Statistical methods (one sample t-test) helped make statistical analysis of the pedagogical experimental data.

© Ilona KOSTIKOVA, & Svitlana MIASOIEDOVA, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

Results. *The complex of tools and techniques to teach English is implemented effectively by online course “English Fastpass” aimed at preparing students for passing English Exam. The offered extra-class activities are definitely very successful: daily vocabulary and grammar tasks followed by weekly online analysis; challenges (one-week of three-week activities focused on improving general English proficiency and cultural awareness); exam boosters focused on practicing a particular exam task type; monthly webinars; quizzes and games. The resulting experimental data showed the significant progress in students' performance in both linguistic and intercultural competences, and specifically in use of English tasks. The final assessment in all English language practical skills, including the competence in intercultural communication, confirmed considerable advance of the all-language competences.*

Conclusion. *The effectiveness of applying different unconventional extra-class activities is proven. They are followed by weekly online analysis. The most helpful of them for learning process are exam boosters, monthly webinars, quizzes and games. Using the visualisation techniques, influencing students' emotions and feelings, the abovementioned online course “English Fastpass” facilitates efficient acquisition and better memorizing along with the ability to use the knowledge in the appropriate tasks, which in the long run will help successful intercultural communication. Judging by the comments made by the students they would find such methods of teaching extremely encouraging and stimulating.*

KEYWORDS: *Extra-Class Activity, Google Classroom, M-Learning, Multimedia, Social Networking Site.*

INTRODUCTION

Problems and challenges the national educational system is facing now started long before the pandemic and were drastically aggravated by the Russian-Ukrainian war, on February 24, 2022, when many educational establishments were damaged or even destroyed, and millions of students and educators had to change their place of living and, consequently, the place and mode of studying.

This war, this tragedy has changed everything. After the first shock from the Russian troop attacks, air bombing and shelling, the higher education in Ukraine has stopped, so-called ‘holidays’ were announced. From April 1, 2022, teaching and learning at Ukrainian universities started again. Of course, it was e-learning or online learning.

The Russian-Ukrainian war in 2022 is not even an educational disaster, it is planned murders and destructions by Russian troops. This is human (students and teachers) deaths, the destruction of university buildings, faculties, departments.

The tragical situation revealed the inconsistencies of traditional educational patterns and the necessity of creating teaching approaches based on the new frameworks.

In addition to conventional criteria of educational quality such as professional academic staff, effective curriculum, appropriate resources, capable leaders and supportive community, one of the key features of education of nowadays is adaptivity to learners' needs and universality.

More specifically, first and foremost students need to get access to the education in conditions often being far from ideal. Millions of students are either hiding in shelters and basements or have been forced to flee their homes to safer places – with safety being the key point rather than other factors.

Thus, the only way for many to continue their studies is online learning, however, in some cases it might be hindered by poor Internet connection, limited feedback, inappropriate instructional methods, or even lack of motivation from students' side.

Thus, **the aim of this paper** is to prove the hypothesis that in order to cope with these adversities and hardships and meet the demands of the new social circumstances, a complex of tools and techniques has to be applied including new teaching strategies with the use of multimedia, mobile applications and employing learning possibilities of social networking sites, Google classroom tools and other instruments provided by modern technologies with online course “English Fastpass”.

To realize the set aim, we are to fulfill **the following objectives**:

- to explain the strategies of teaching English implemented by online course “English Fastpass”;
- to illustrate the implementation of social media as an effective tool for teaching English speaking;
- to present the results of the experimental research aimed at investigating students' progress in tests due to online course “English Fastpass”.

METHODOLOGY

In this research theoretical, empirical and statistical methods are used. Theoretical methods (analysis and synthesis) serve to

analyze opportunities, advantages and disadvantages of social media as a new tool to teach English speaking as well as their application features and to prepare upper-intermediate students to pass the exam.

Empirical ones (observation, testing, pedagogical experiment) provide conducting the experiment itself, detailed and achievement tests in order to collect data for examining the efficiency of use systematic social media to teach English speaking with upper-intermediate learners.

Statistical methods (one sample t-test) helped make statistical analysis of the pedagogical experimental data; the experiment was conducted during one academic year in four groups of online learners. For one year, during the preparation period before passing the English language exam the advance of the students who were taught with supporting social media speaking activities, students' progress was carefully observed and measured.

RESULTS

IT innovations and the popularity of the Internet (Culp, Honey, Mandinach, 2005) had a profound effect on the forms and methods of instruction in the ESL classroom (Specht, 2022) long before the pandemic by enabling educators and students to overcome barriers of distance and enhance the content of instructional materials as well as to encourage cooperative learning and to stimulate increased teacher – student interaction (Jackson, 2021).

The recent papers describe online teaching and learning issues, namely, the teacher's role in online learning (Popa et al., 2020; Schleicher, 2020), its perspectives (Kalita, 2020; Traxler, 2018), online as a means of life-long learning, online courses

on the basis of different educational platforms and cloud computing (Banča & Tongtep, 2021; Holubnycha et al., 2019; Yang et al., 2021).

As well as they define online teaching and learning principles, data analysis of main current educational trends in different countries (Wotto, 2020), students' perception of online learning and teachers' attitude to online teaching (Burac et al., 2019; Coman et al., 2020; Holubnycha et al., 2021; Sadeghi, 2019).

Predictably, the use of Internet, online, multimedia in the learning process has become a must: compared to the traditional teaching methods in which students are usually passively spoon fed with large amount of grammatical rules and vocabulary, digital means have shown their superiority.

Students can be easily exposed to sound, video, and animation of the authentic target language, which can give them the strong visual impact and make them get involved in the authentic language environment more completely. Learners' language acquisition can be improved by means of using the computer's integration of text, sound, graphics and image to present the learning content.

The Internet offers a lot of opportunities for students to interact with native speakers in a convenient way and provides access to the most updated information throughout the world. Also, teachers can present video and audio materials separately or simultaneously to the students according to the teacher's objectives. In this case, not only could the multimedia make the students get more interested in English learning, but also more progress could be made compared with that one in the traditional classroom.

Computers are the main tool used to present multimedia items such as video,

PowerPoint presentations, animation and sound. In the classroom, computers have made a huge impact on the way teachers provide information to their students.

No doubt, using computers, teachers have evolved their teaching methods; instead of lecturing and writing notes on a blackboard, teachers can now show their students visual and audio material to enhance their learning. These methods are much more productive for students who process information visually.

Computer technology has given us the Internet, which is an electronic medium in which both print and visual resources are invariably bound.

At the click of a mouse, text resources present students with a diverse collection of authentic English language texts dealing with a wide variety of interdisciplinary topics, and at each web page link, students have the advantage of reading print texts with the benefit of immediate visual reinforcement provided by pictures and slide shows, facilitating the collaborative effects of print and visual information processing.

Integrating the Internet yields the additional benefit of increased student motivation. Besides, students develop greater confidence in their ability to use English because they need to interact with the Internet entirely through reading and writing.

Using the Internet for focus discipline research facilitates development higher order thinking skills and also promotes critical and social literacy as students encounter a variety of information, synthesizing that information through cooperation and collaboration with their peers.

Regardless all the advantages, the application of multimedia in teaching is not as widely used as it could be expected.

A reason for this could be the underdevelopment of technology and immature pedagogy about using multimedia in teaching foreign languages.

For example, multimedia cost is high and not all educational institutions can make use of this tool. In addition, many teachers are not trained in using multimedia to teach English.

In general, those who use multimedia as a teaching tool find that it adds more interest to the class, and because students become interested in multimedia and computers, they develop more language skills.

We believe, multimedia effectiveness lies in the ability to expose students to real situations, language use and pronunciation through video, sound, graphics and computer interaction.

Incorporating technology into education caused the introduction of innovative methods of teaching that have become a breakthrough in the education industry. Mobile learning (M-learning) that is usually defined as "learning across multiple contexts, through social and content interactions, using personal electronic devices" (Barrs, 2011) has become a new trend in EFL teaching practice.

Mobile devices hold great potential for language learning such as anytime access to an ever-increasing amount of information and resources; sharing learning materials and information through apps and/or social networking sites; the possibility to ask questions via the Internet; the ability to study through games; to keep study records; to create one's own vocabulary lists; using photos on students' phones for introductions, descriptions, telling stories etc.

M-learning method contributes to creation of authentic learning

environment in which learners can work with their mobile devices for audio messaging, voice recording, pronunciation comparison, and audio or video conferencing.

These reasons support the use of smartphones and tablet PCs for foreign language learning and make communication between a teacher and students more efficient and productive.

However, introducing mobile technology into higher education is more than applying technical innovations. It also means providing technical support and learning strategies for students and instructors who wish to implement mobile learning in their particular academic setting as well as developing new apps for educational purposes.

One of the newest instruction approaches that caters to the needs of modern-day learners is Electronic learning (E-Learning). This teaching strategy refers to "the delivery of a learning, training or education program by electronic means" and involves "the use of a computer or electronic device (e.g. a mobile phone) in some way to provide training, educational or learning material" (Lips, 2010).

In general, e-learning environment includes a virtual classroom with an instructor (tutor) who plans group activity in the virtual class, and students that choose an e-platform to learn, go to a specialized website, register with the personal data and become users.

E-learning education can be delivered in three different ways:

- 1) synchronously, providing the interaction of an instructor and a student at the same time over the Internet;
- 2) asynchronously, giving students the opportunity of the Web based training on his own time and schedule, without live interaction with the instructor;

3) independently, allowing an individual user to download course material from the Internet or use it directly from the site, going through it alone.

In fact, learning process individualization is mentioned as one of the key advantages of e-learning. As for the other benefits, they are as follows: easy accessibility anywhere any time, reduced cost, mobility, improved performance, higher motivation, attractive content package, efficiency of conveyed message etc.

However, scholars also point to some drawbacks of e-learning approach among which there is high cost of technical equipment and software, dependence on the quality of Internet connection, time-consuming for teachers; reducing the ability of verbal expression, lack of familiar educational patterns and learning routines.

Thus, even despite its benefits and attractiveness as well as effectiveness in particular educational environments, E-learning can't totally substitute traditional face-to-face teaching model.

The solution to this problem that allows to combine traditional classroom methods (Oech, 1983) with technology-mediated instructional forms and practices is the so called "blended learning". This teaching technique means a much greater change in basic instruction rather than simply adding computers to classrooms; it represents, in many cases, a fundamental change in the way teachers and students approach the learning.

The efficiency and main benefit of this method is that the online and in-person learning experiences would go side by side and complement one another: students might attend a class taught by a teacher in a traditional classroom setting and later on, independently, complete online components of the course outside the classroom.

Thus, this "hybrid" system enables to incorporate new forms of collaborative and independent learning activities, personalized training experiences and teacher's feedback as well as freedom, convenience and flexibility that are not possible in traditional courses.

Besides implementing blended learning into ESL classroom helps to create an authentic environment that most closely resembles actual use of the target language in that way significantly improving the learning experience.

Blended learning is a mix of three different components:

- traditional classroom instructor-led foreign language teaching;
- synchronous online formats such as live classes, e-Meetings, instant messaging and e-mailing, webinars, online conferences, online quizzes etc.;
- asynchronous self-paced study that can include web/computer-based training modules, challenges, taking online tests or quizzes, gaining access to the variety of reference materials (documents, presentations, web pages, video and audio files, discussion forums etc.).

Compared to traditional education, blended instruction offers teachers the possibility to spend more time with learners in both small groups and individually, create a flexible and active learning environment that has the potential to change students' experiences and outcomes and can allow teachers to monitor their students' progress more closely than traditional methods.

Reasons for using blended instruction include "improved pedagogy, easy access to knowledge, more interaction among learners, personal presence, cost effectiveness, and ease of revision of learning content" (Bañados, 2013).

Additionally, blended learning puts forward new demands for teachers and students: the latter have to be responsible for their own learning process, and teachers need to take on roles as material designers, producers of media resources, managers of the learning environment, and online tutors (Tayebinik, Puteh, 2012).

As a result, when implemented effectively, a blended learning program can make a better use of English language instruction as it allows students to explore and practice new language not only in the classroom, but also in their own time and at their own pace according to their own personal learning needs thus resulting in student success, satisfaction, and retention.

As mentioned above, the complex of tools and techniques to teach English was implemented by online course “English Fastpass” <https://www.englishfastpass.com/> aimed at preparing students for passing English in Unified Entrance Exam as a national exam in Ukraine to become Master students.

The experiment intended to confirm or reject the idea of the plausibility of implementing additional extra-class activities for faster progress in development of students' language skills.

The experimental group included 28 students of year four of different Ukrainian universities who in addition to their compulsory live classes held every week participated in other educational activities including:

- the students were about the same age (from 20 to 21 years old), but different gender (eight boys and twenty girls);
- they were of different occupations majoring in law, psychology, economics, chemistry, programming etc.;
- they were highly motivated and dedicated (in view of the fact that their purpose was admission to the Master's

degree programs based on the results of the Unified Entrance Exam);

- their academic performance in other subjects demonstrated their critical thinking and high learning potential.

The main objective of the course was achieving the linguistic and intercultural competences at level B2-B2+ on Common European Frameworks of Reference known as CEFR which, according to the Association of Language Testers in Europe known as ALTE, means that by the end of the course students have to obtain the real-life language competencies sufficient for successful intercultural assimilation in an English-language environment.

The series of the placement tests taken in the beginning of the course showed that the weak link that impeded efficient performance and fluent communication of the majority of the students was inability to use paraphrasing, to work with key words, to recognize the verb form in the context or tell the difference between the words with similar meaning.

According to the results of the placement test, on average only 35 per cent of the task (15 questions) were covered. In order to solve this particular problem and enhance the students' advance in English, some extra-class activities were offered:

- daily grammar tasks followed by weekly online analysis;
- daily vocabulary tasks followed by weekly online analysis, see Figure 1;
- challenges (one-week of three-week activities focused on improving general English proficiency and cultural awareness), see Figure 2;
- exam boosters focused on practicing a particular exam task type;
- monthly webinars;
- quizzes and games.

Figure 1

Daily Tasks (grammar and vocabulary) at online course “English Fastpass”.

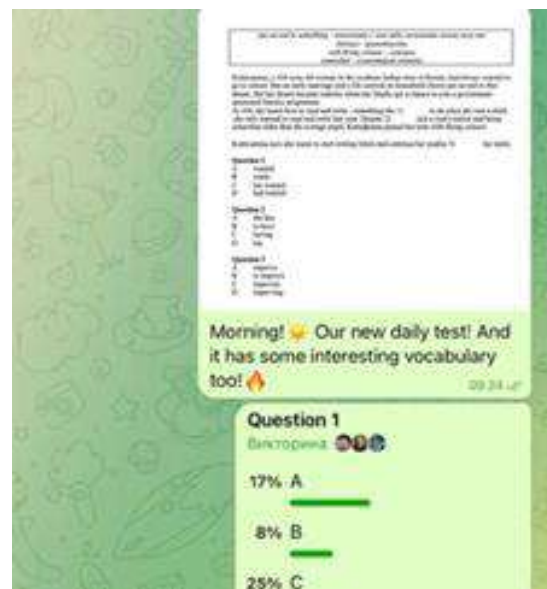
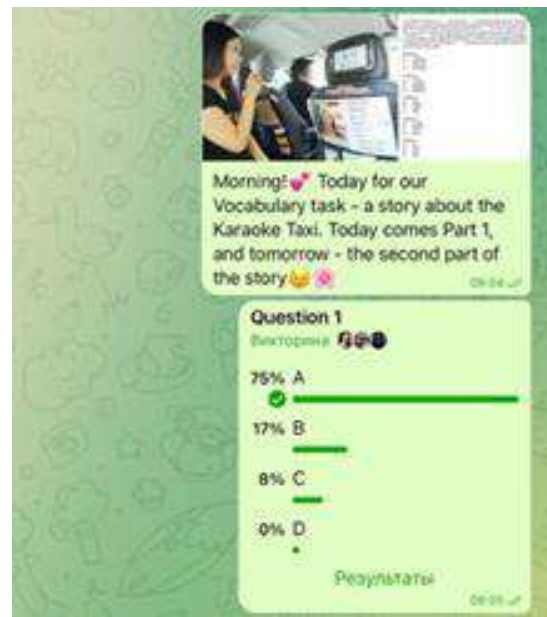
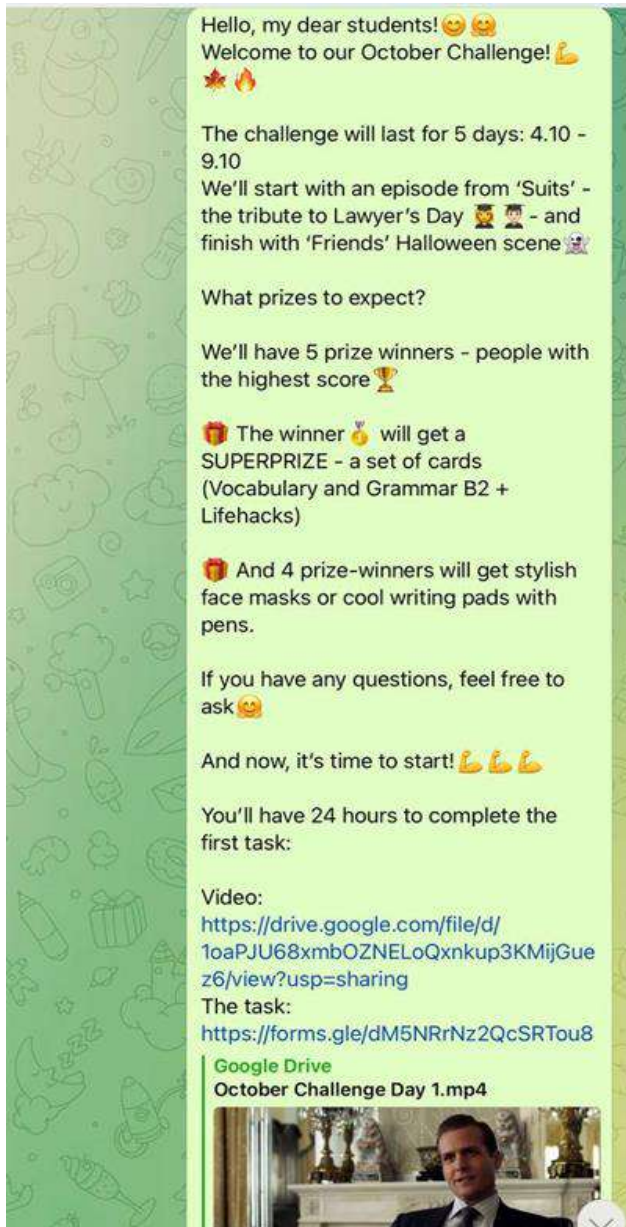
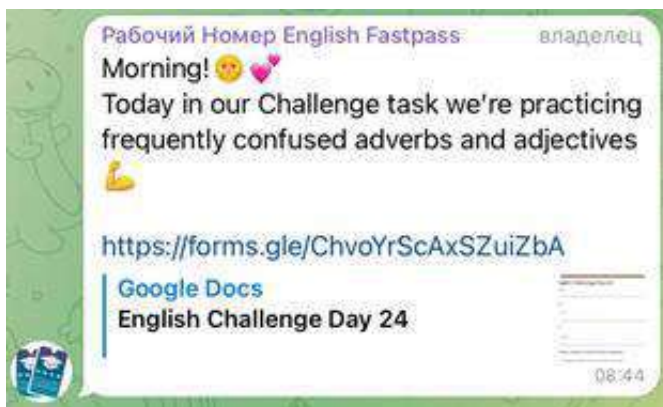


Figure 2.

Challenges at online course “English Fastpass”



In order to provide the credibility of the results, the students were given a mid-term test and final end-of-the-course mock exam which allowed us to define their achievement in the English language competence according to the CEFR as Common European Framework of Reference for Languages scale.

The resulting data showed significant progress in students' performance in both linguistic and intercultural competences, and specifically in use of English tasks (Table 1).

The resulting data prove that students significantly improved their performance in Unified Entrance Exam on average in 15.1% during the first term, and in 20.2% in the second semester, overall progress being 35.3%.

Correspondingly, their final assessment in all English language practical skills,

including the competence in intercultural communication, confirmed considerable advance of the all-language competences of students in the experimental group.

Moreover, as it seemed reasonable to survey the students' attitude to the effectiveness of different types of activities. They were asked to rate these activities from 1 to 5 (1 for being the least effective and 5 for being the most effective).

Table 2 represents students' responses in which the respondents answered that they consider daily grammar and vocabulary tasks followed by weekly online analysis to be the most helpful for their learning process, followed up by exam boosters, monthly webinars, quizzes and games, and challenges being less important in terms of exam preparation.

Table 1

The Results of Students' Progress at the Different Stages of the Course

| Test | Results (Mean ± SD) | Average Progress |
|-----------|---------------------|------------------|
| Placement | 35.2 ± 4.68 | |
| Mid-term | 50.3 ± 4.72 | 35,3 % |
| Final | 70.5 ± 4.05 | |

Table 2

Responses of 28 students of the experimental group to the question: 'Rate these activities in terms of their effectiveness for exam preparation'.

| Activity | Average Rate |
|---|--------------|
| – daily grammar tasks followed by weekly online analysis | 5 |
| – daily vocabulary tasks followed by weekly online analysis | 5 |
| – exam booster | 4 |
| – challenges | 3 |
| – monthly webinars; | 4 |
| – quizzes and games. | 4 |

DISCUSSION

To discuss this issue, we should say that extra-class activities are really effective for e-learning. The result comparison shows their positive outcomes in many countries all over the world. They are Turkey (Aksu, 2020), Ukraine (Voloshyna, 2021; Kolbina, Oleksenko, 2020), Philippines (Moralista & Oducado, 2020), India (Dubey & Pandey, 2020)

The majority of researchers (R. Moralista and R. Oducado (2020), S. Seo (2020), U. Kalita (2020), C. Aksu (2020), P. Cabrera-Solano, P. Gonzalez-Torres and C. Ochoa-Cueva (2021), A. Maatuk, E. Elberkawi, S. Aljawarneh, H. Rashaideh, and H. Alharbiet (2021)) underline the advantages of e-teaching so that they could apply online effectively.

CONCLUSION

On balance, the synthesis of the research results allows us to draw the conclusion about the effectiveness of applying of some unconventional extra-class activities, specifically, daily grammar and vocabulary tasks followed by weekly online analysis to be the most helpful for

learning process, exam boosters, monthly webinars, quizzes and games as highly effective tools for teaching students to pass Unified Entrance Exam.

Using the visualisation techniques, influencing students' emotions and feelings, the abovementioned online course "English Fastpass" for all intends and purposes facilitates efficient acquisition and better memorizing along with the ability to use this knowledge in the appropriate tasks, which in the long run will help successful intercultural communication in an authentic English language environment.

Judging by the comments made by the students of the experimental group and the results of the questionnaires filled in by these students, they would find such methods of teaching extremely encouraging and stimulating.

That opens the perspectives for further research of new, unconventional methods of English language instruction that can make learners regard education as an exciting, inspiring and productive process of cognition.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Aksu, C. (2020). Distance Education in COVID-19 Pandemic: Insights from Turkish Students. *Research Methods in Social Sciences Final Report, 11*, 1-15. https://www.researchgate.net/publication/344787867_Distance_Education_in_COVID-19_Pandemic_Insights_from_Turkish_Students
- Bañados, E. (2013). A Blended-learning Pedagogical Model for Teaching and Learning EFL Successfully Through an Online Interactive Multimedia Environment. *CALICO Journal, 23*(3), 533–550. <https://doi.org/10.1558/cj.v23i3.533-550>

- Bancha, W., & Tongtep, N. (2021). Enhancing Vocabulary Memorization and Retention through LMS and MultiEx Game Platforms among Thai Tertiary Students. *International Journal of Learning, Teaching and Educational Research*, 20(10), 173-192. <https://doi.org/10.26803/ijlter.20.10.10>
- Barrs, K. (2011). Mobility in learning: The feasibility of encouraging language learning on smartphones. *Studies in Self-Access Learning Journal*, 2(3), 228-233. <http://sisaljournal.org/archives/sep11/barrs> .
- Burac, M. A. P., Fernandez, J. M., Cruz, M. M. A., & Cruz, J. D. (2019). Assessing the impact of e-learning system of higher education institution's instructors and students. *IOP Conference Series: Materials Science and Engineering*, 482, 1-8. <https://doi.org/10.1088/1757-899X/482/1/012009>
- Cabrera-Solano, P., Gonzalez-Torres, P., & Ochoa-Cueva, C. (2021). Using Pixton for Teaching EFL Writing in Higher Education during the Covid-19 Pandemic. *International Journal of Learning, Teaching and Educational Research*, 20(9), 102-115. <https://doi.org/10.26803/ijlter.20.9.7>
- Coman, C., Tîru, L. G., Mesesian-Schmitz, L., Stanciu, C., & Bularca, M. C. (2020). Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' Perspective. *Sustainability*, 12(24), 10367. <https://doi.org/10.3390/su122410367>
- Culp, K. M, Honey, M., & Mandinach, E. (2005). A retrospective on twenty years of education technology policy. *Educational Computing Research*, 32(3), 279-307. <http://docplayer.net/7158426-A-retrospective-on-twenty-years-of-education-technology-policy.html>
- Dubey, P., & Pandey, D. (2020). Distance learning in higher education during pandemic: challenges and opportunities. *International Journal of Indian Psychology*, 8(2), 43-46. <https://doi.org/10.25215/0802.204>
- Holubnycha, L., Kostikova, I., Kravchenko, H., Simonok, V., & Serheieva, H. (2019). Cloud Computing for University Students' Language Learning. *Revista Romaneasca pentru Educatie Multidimensionala*, 11(4), 55-69. <http://dx.doi.org/10.18662/rrem/157>
- Holubnycha, L., Kostikova, I., Sytnykova, Yu., Melnikova, T., Guzenko, N., & Dorozhko, A. (2021). Information technology implementation in on-line teaching and learning: staff and students' attitude. *Journal of Theoretical and Applied Information Technology*, 99(21), 4958-4968. <http://www.jatit.org/volumes/Vol99No21/4Vol99No21.pdf>
- Jackson, E. A. (2021). Efficacy of Virtual Technology as the Way Forward for Teaching and Learning with the Experience of a Global Pandemic. *Educational Challenges*, 26(2), 6-12. <https://doi.org/10.34142/2709-7986.2021.26.2.01>
- Kalita, U. (2020). A multivariate econometric perspective on distance learning and livelihood status in India. *International Journal of Knowledge and Learning*, X(Y), 1-12. https://www.academia.edu/43850117/A_multivariate_econometric_perspective_on_distance_learning_and_livelihood_status_in_India
- Kolbina, T., & Oleksenko, O. (2020). Implementation of Distance Learning in Ukraine. *Educational Challenges*, 25(1), 46-54. <https://doi.org/10.34142/2709-7986.2020.25.1.04>

- Lips, D. (2010, January 12). *How Online Learning Is Revolutionizing K-12 Education and Benefiting Students. Report Technology*. The Heritage Foundation. <https://www.heritage.org/technology/report/how-online-learning-revolutionizing-k-12-education-and-benefiting-students>
- Maatuk, A. M., Elberkawi, E. K., Aljawarneh, S., Rashaideh, H., & Alharbiet, H. (2021). The COVID-19 pandemic and E-learning: challenges and opportunities from the perspective of students and instructors. *Journal of Computing in Higher Education*, 34, 21-38. <https://doi.org/10.1007/s12528-021-09274-2>
- Moralista, R. B., & Oducado, R. F. (2020). Faculty Perception toward Online Education in Higher Education during the Coronavirus Disease 19 (COVID-19) Pandemic. *Universal Journal of Educational Research*, 8(10), 4736-4742. <https://doi.org/10.31219/osf.io/nhr7b>
- Oech, R. (1983). *A Whack on the Side of the Head: How to Unlock your Mind for innovation*. Warner Books; Warner Books ed edition. ISBN-10:0446380008; ISBN-13:978-0446380003
- Popa, D., Repanovici, A., Lupu, D., Norel, M., & Coman, C. (2020). Using Mixed Methods to Understand Teaching and Learning in COVID 19 Times. *Sustainability*, 12(20), 8726. <https://doi.org/10.3390/su12208726>
- Sadeghi, M. (2019). A Shift from Classroom to Distance Learning: Advantages and Limitations. *International Journal of Research in English Education*, 4(1), 80-88. <http://ijreeonline.com/article-1-132-en.html>
- Schleicher, A. (2020). *The impact of Covid-19 on education. Insights from education at a glance 2020*. OECD. <https://www.oecd.org/education/the-impact-of-covid-19-on-education-insights-education-at-a-glance-2020.pdf>
- Seo, S. E. (2020). *A Study of the Benefits and Applications of Online Theological Education for Western Cross-Cultural Teachers and Remote Local Churches of Colombia, South America*. Deerfield. <https://www.academia.edu/43416051/a-study-of-the-benefits-and-applications-of-online-theological-education-for-western-cross-cultural-teachers-and-remote-local-churches-of-colombia-south-america>
- Specht, A. L. (2022). Practices and their Challenges in an English Teaching Project of a Brazilian State University during the Pandemic. *Educational Challenges*, 27(1), 23-33. <https://doi.org/10.34142/2709-7986.2022.27.1.02>
- Tayebinik, M., & Puteh, M.M. (2012). Blended Learning or E-Learning? In *International Conference on Advanced Information System, E-Education & Development (ICAISED 2012)* (pp. n.d.). https://www.academia.edu/2496184/Blended_Learning_or_E_learning
- Traxler, J. (2018). Distance learning – predictions and possibilities. *Education Sciences*, 8(35), 1-13. <https://doi.org/10.3390/educsci8010035>
- Voloshyna, O. (2021). Quality of Distance Learning in Kirovohrad Region, Ukraine, During Quarantine Restrictions. *Educational Challenges*, 26(2), 100-111. <https://doi.org/10.34142/2709-7986.2021.26.2.09>

- Wotto, M. (2020). The Future High Education Distance Learning in Canada, the United States, and France: Insights from Before COVID-19 Secondary Data Analysis. *Journal of Educational Technology Systems*, 49(2), 262-281. <https://doi.org/10.1177%2F0047239520940624>
- Yang, X., Kuo, L. J., Eslami, Z. R., & Moody, S. M. (2021). Theoretical Trends of Research on Technology and L2 Vocabulary Learning: A Systematic Review. *Journal of Computers in Education*, 8, 465-483. <https://doi.org/10.1007/s40692-021-00187-8>

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:**ЕЛЕКТРОННЕ НАВЧАННЯ: АЛЬТЕРНАТИВНІ ОНЛАЙН КУРСИ
«ENGLISH FASTPASS»**

Метою цієї роботи є доведення припущення про ефективне подолання викликів воєнного часу та труднощів пандемії завдяки застосуванню комплексу засобів і технологій, включаючи нові стратегії електронного онлайн навчання з використанням мультимедійних засобів, мобільних додатків, навчальних можливостей сайтів соціальних мереж, інструментів Гугл-класу з альтернативним онлайн-курсом «English Fastpass».

Методологія. У цьому дослідженні використовуються теоретичні, емпіричні та статистичні методи. Теоретичні методи (аналіз та синтез) служать для аналізу можливостей, переваг і недоліків соціальних медіа як нового інструменту навчання. Емпіричні (спостереження, тестування, педагогічний експеримент) призначаються для проведення самого педагогічного експерименту. Статистичний аналіз даних педагогічного експерименту здійснено за допомогою статистичних методів (t-тест).

Результати. Комплекс засобів і технологій навчання англійської мови ефективно реалізує альтернативний онлайн-курс «English Fastpass», спрямований на підготовку студентів до складання іспиту з англійської мови. Пропоновані позааудиторні заходи є доволі успішними: це щоденні лексико-граматичні завдання з подальшим щотижневим онлайн-аналізом; мовленнєві вправи (один тиждень із трьох цілеспрямовано на покращення загального рівня володіння англійською мовою та культурного занурення); екзаменаційні бустер-вправи, зосереджені на відпрацювання певного типу екзаменаційного завдання; щомісячні вебінари; вікторини та ігри. Отримані експериментальні дані показали значний прогрес успішності студентів як у лінгвістичній, так і міжкультурній компетентності, і, зокрема, у виконанні лексико-граматичних завдань з англійської мови. Підсумкова оцінка з усіх практичних навичок англійської мови, включаючи компетентність в міжкультурній комунікації, підтвердила значний прогрес усіх мовних компетентностей студентів.

Висновок. Доведено ефективність застосування альтернативних позааудиторних заходів, які мають супроводжуватися щотижневим онлайн-аналізом. Найбільш корисні для процесу навчання наступні: екзаменаційні бустер-вправи, щомісячні вебінари, вікторини, ігри. Використовуючи методи візуалізації, впливаючи на емоції та почуття

студентів, пропонований онлайн-курс «English Fastpass» сприяє ефективному засвоєнню та кращому запам'ятовуванню англійської, а також здатності використовувати набуті знання на практиці у відповідних завданнях, що в довгостроковій перспективі сприятиме успішній міжкультурній комунікації. Судячи з відгуків студентів, вони вважають таке навчання надзвичайно обнадійливим та стимулюючим.

КЛЮЧОВІ СЛОВА: Гугл-клас, мобільне навчання, мультимедіа, позакласна діяльність, сайт соціальної мережі.

CITE THIS ARTICLE AS (APA style):

Kostikova, I., & Miasoiedova, S. (2022). E-Learning Teaching: Supportive Online Course 'English Fastpass'. *Educational Challenges*, 27(2), 91-104. <https://doi.org/10.34142/2709-7986.2022.27.2.07>



<https://doi.org/10.34142/2709-7986.2022.27.2.08>

DIGITAL RESOURCES AS A WAY TO INCREASE THE MOTIVATION OF ECONOMIC SPECIALTIES STUDENTS IN STUDIES OF MATHEMATICS

Received: 29/08/2022

Accepted: 30/09/2022

Irina LEBEDEVA¹, Larisa NORIK², & Stepan LEBEDEV³



¹ *Ph.D. in Physics and Mathematics, Associate Professor, Department of Higher Mathematics and Economic-Mathematical Methods, Simon Kuznets Kharkiv National University of Economics, 9a, Nauky Avenue, Kharkiv, Ukraine.*

✉ **E-Mail:** irina.lebedeva@hneu.net

ORCID <https://orcid.org/0000-0002-0381-649X>



² *Ph.D. in Economics, Associate Professor, Department of Higher Mathematics and Economic-Mathematical Methods, Simon Kuznets Kharkiv National University of Economics, 9a, Nauky Avenue, Kharkiv, Ukraine.*

✉ **E-Mail:** larisa.norik@hneu.net

ORCID <https://orcid.org/0000-0002-7077-1260>



³ *Senior Lecturer, Department of Higher Mathematics and Economic-Mathematical Methods, Simon Kuznets Kharkiv National University of Economics, 9a, Nauky Avenue, Kharkiv, Ukraine.*

✉ **E-Mail:** stepan.lebedev@hneu.net

ORCID <https://orcid.org/0000-0001-9617-7481>

ABSTRACT

*The **purpose** of the work is to analyze the technical, methodical and psychological aspects of digitalization in education and, in particular, the methods of ensuring the effectiveness of independent work of students in the conditions of e-learning. The main attention is paid to the problem of the*

© Irina LEBEDEVA, Larisa NORIK, & Stepan LEBEDEV, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

influence of interactive educational technologies on the formation of external and internal motivation of students of economic specialties to study mathematical disciplines.

Methodology. *In the conditions of e-learning continuous monitoring of the success of students in mastering mathematical methods and their application to solve economic problems was carried out. The success of each student in performing each type of work separately, as well as his overall rating among other students in the group, were determined. These results were supplemented by the results of the students' questionnaire regarding their own attitude towards interactive technologies as a tool aimed at forming motivation for learning.*

Results. *The virtual environment for e-learning was built using Moodle LMS and contained learning digital resources of various levels of interactivity, including electronic multimedia publications. This helped to fully meet the needs of the distance educational process. To form the student's external motivation, the authors used an electronic journal in which the types of current tasks, points for their completion, the student's rating for each type of tasks, as well as for all types of tasks in general, are defined. To support internal motivation, interactive learning elements were developed and implemented. The effectiveness of the use of digital resources was confirmed during the monitoring of students' success and by the results of the survey of the participants of the experiment.*

Conclusions. *A significant advantage of the use of interactive components in the educational process should be considered the creation of conditions for a better understanding of theoretical material and using mathematical apparatus for solving real economic problems. The use of multi-level digital resources gives the student the opportunity to build an individual educational environment that increases internal motivation to study.*

KEYWORDS: *Digital Resources, Electronic Multimedia Publication, Remote Learning, Individual Educational Environment, External and Internal Motivation.*

INTRODUCTION

In modern conditions of the formation of the knowledge economy, the country's competitiveness depends on its competitiveness in the field of science and education. In Ukraine, higher education has a mass character. Among the population aged 23 and over, 82.7% have a higher education, and according to the Tertiary Enrollment component of the Global Innovation Index, Ukraine ranked 14th among 131 countries in 2020 (Global Innovation Index 2020, 2020).

At the same time, according to the Knowledge Impact component, it took only 45th place in the rating, and according to the Creative Goods and Services component, it took only 95th place. This means that there is a gap between the quantitative indicator of education and indicators that reflect the impact of education on the development of the economy. And this is related to the quality of education. Thus, according to the 2018 QS Higher Education System Strengths Rating (QS Higher Education System, 2018), Ukraine ranked 44th in

terms of quality of education among 50 countries. All this indicates that the quality of higher education in Ukraine does not meet the expectations of employers, students, or society as a whole.

In order for graduates of higher education institutions to be competitive on the labor market, they need not only to have modern theoretical knowledge and practical skills, but also to be able to solve complex tasks, create innovative intellectual products, and also learn to learn, that is, to be internally motivated to learn. Therefore, one of the basic directions of education reform in Ukraine (Reforma osvity, 2020) is to ensure high-quality higher education and expand opportunities for adult education. In these conditions, the education system must develop and improve in order to be able to fulfill its mission, namely to provide a person with the opportunity to realize himself in the future.

And one of the leading trends in the development of higher education, the implementation of which can solve this problem, is considered digitalization of education. It is thanks to digitalization that it is possible to ensure the access of a wide range of applicants to quality education not only at the national, but also at the world level. Therefore, when building the latest educational programs, the acquisition of universal competencies is considered the most relevant: the ability to learn, process information, quickly master new progressive technologies, the ability to think critically and approach tasks creatively (Strategy for the Development of Higher Education, 2020, p. 30).

And the transition of educational technologies to a digital format is able to ensure the accumulation of such competencies. However, there is a significant gap between the opportunities offered by modern digital technologies

and those information and communication technologies that are used in the educational process, if such use takes place in general. Therefore, there is a need to fully realize the advantages provided by modern digital technologies for the educational process improvement and the use of interactive learning methods to increase its effectiveness.

At the level of higher education, digitalization involves admittance to respective technologies for both students and teachers, as well as for the administration of the educational institution, the availability of digital multimedia content, as well as the ability and skills of students and teachers to use digital learning resources (Project: Digital Agenda of Ukraine, 2020 25). Digital learning resources are any educational information provided in digital format.

At the same time, preference is given to open resources for that any digital devices (from a computer to a mobile phone) are suitable. It should also be emphasized that one of the features of the present time is the rapid change of educational content, therefore, it requires regular updating, and this is easier to do if it is provided in digital format.

Therefore, digitalization is considered as one of the leading factors in building an innovative university. It is the creation of the industry of innovative digital technologies that makes it possible to achieve the strategic goal of education reform in Ukraine, namely, to ensure the availability of high-quality higher education for various segments of the population.

Taking into account the aging of the population, on the one hand, and the accelerated development and implementation of the latest technologies in various fields, on the other hand, the use

of digital technologies creates conditions for any person to renew his professional qualities throughout his life, which is provided for by the UNESCO "Lifelong Learning" program.

Social, theoretical and technical aspects of the application of information technologies in education began to attract the attention of scientists and practitioners at the end of the 20th century. However, these questions became especially acute in connection with the spread of COVID-19, when the educational process in educational institutions of all levels began to be carried out in a distance form (Jackson, 2021).

What urgent measures should be implemented to accelerate the digitization of education in Ukraine? First of all, attention is paid to the software of the educational process at the "student" and "teacher" levels (Bykov, Spirin, & Pinchuk, 2020; Morze, et al., 2021; Modlo, et al., 2020; Shakhina, 2017, etc.).

There are also examples of the implementation of information systems supporting the educational activities of universities simultaneously at three levels: "student", "teacher", "administration" (Kukharenko, & Bondarenko, 2020; Trius, et al., 2021). In fact, we are talking about the creation of a virtual university as a digital reflection of the corresponding institution of higher education.

However, the development of software is only one aspect of the problem. Another, but no less important, is the structure and content of digital learning resources. The teacher must not only ensure the high-quality content of these resources, but also rationally build them to realize their full potential. And not all teachers have the necessary skills for this (Börnert-Ringleb, Casale, & Hillenbrand, 2021).

There are many types of digital learning resources, among which the electronic textbook as a structured multimedia publication occupies the highest level. Such an electronic educational and methodological complex is able to ensure user interactivity thanks to the creation of an educational SMART environment (Nahaev, & Hrynova, 2020).

The main advantage of multimedia electronic textbooks is that they are able to provide an interactive dialogue between the user and the software system, while there is an opportunity to choose options for the level of educational content, mode and place of work, that is, the student has the opportunity to create his own educational space (Gurevich, Kademiya, & Shevchenko, 2012, p.71).

This means that the user has the opportunity to customize and optimize the organization of the learning process itself. These properties of digital resources are important not only for ensuring the quality of education, but also for the formation of students' internal motivation to study. For example, the use of digital resources increases student engagement in face-to-face learning (Ullah, & Anwar, 2020).

When introducing learning digital resources in the conditions of distance learning, there is a need to create effective factors that motivate the user to study, and this puts forward additional requirements for the content of the digital resource and its structure. That is why most studies devoted to the structure of e-learning tools emphasize the importance of having an interactive component and improving the principles of its development. However, these issues are just beginning to be studied.

The purpose of this article is generalizing the experience of introducing digital

resources in the study of mathematical disciplines by students of economic specialties; study of factors that ensure motivation of students in distance learning conditions; determination of the influence of the use of interactive learning digital resources on the effectiveness of the formation of student motivation factors.

THEORETICAL FRAMEWORK

In the general case, motivation is considered as a process of influencing oneself or another person in order to encourage certain actions that are necessary to achieve a predetermined goal. In our study, such a goal is the acquisition of theoretical knowledge in mathematical disciplines and practical skills in their application to solving real economic problems. And it is necessary to direct students' aspirations to achieve this goal. The effectiveness of managing this process largely depends on how successfully the factors of external and internal motivation work, that is, how well the levers of influence are correctly chosen.

When building a motivation system in the educational process, such theories of motivation as the Social Cognitive Theory and the Self-Determination Theory are used (Schunk, Meece, & Pintrich, 2014). According to the Social Cognitive Theory, a person acquires new knowledge as a result of social interaction. Depending on whether the reward or punishment is received by the person whose behavior is considered as a role model, the observer makes a relevant decision about his actions in similar circumstances in the future.

Self-Determination Theory is based on distinguishing motivation into two types: external and internal. Central to this theory is the distinction between autonomous

and controlled motivation. Autonomy implies that a person makes decisions according to his feelings and experiences. Intrinsic motivation is an example of autonomous motivation, when a person learns what is interesting to him, he considers it important, and therefore he applies willpower to it.

On the contrary, external motivation assumes that a person is driven to perform certain actions by external pressure, the feeling of the need to participate in these actions, social factors, etc. It should be noted that in general, external and internal motivation are not considered as two opposite poles. Between them there is a continuum of different forms, which to one degree or another combine these two types of motivation.

In turn, the choice of motivation methods is related to the learning model, which is the leading one when studying one or another discipline. The most common are four models (Vermunt, & Donche, 2017): learning that is focused on reproduction; meaning-oriented learning; learning that is focused on implementation; learning that does not have a specific orientation. In the case of using a model of learning that is focused on reproduction, the student is motivated only to reproduce the educational material during the test.

The meaning-oriented model of learning assumes that a student must understand the relationship between various structural elements of an educational discipline, be critical of the information he receives. He regulates his own learning and strives to achieve the most complete understanding of the material studied within the given academic discipline.

Studying according to the embodiment-oriented model, the student's efforts are aimed at determining the connections between the knowledge he receives and

the possibilities of their application in his future professional activity. It can be expected that the use of interactive learning technologies in combination with the possibilities of digitization will increase the effectiveness of learning in the implementation of any of these models.

The first studies of motivation to study during the period of quarantine restrictions related to the epidemic of COVID-19 revealed that the majority of students were tuned to a model of learning that is oriented to reproduction (Rahiem, 2020). And our experience also proves this. Such students were not ready for autonomy in learning, and for them the most effective was external motivation in the form of grades as a reward for completing tasks, as well as in the form of penalties for ignoring tasks. Some students even lost motivation to study, which can be explained by their lack of psychological stability (Cole, Field, & Harris, 2004).

But among the students there were those who perceived some aspects related to distance learning as advantages (Rahiem, 2021), namely, personal (challenge, curiosity, self-determination, satisfaction), social (well-being, relationships) and external environment (convenience, release of additional time). For such students, electronic learning tools made it possible to find additional motivational resources.

And it can be expected that digital resources are the most capacious in this context. It is they that allow creating conditions for the development of internal motivation among those students who are focused on determining the meaning of acquired knowledge and their further implementation in practical activities.

In our research, the results of which are presented in this article, we see the task of

the teacher in the development of such a structure of digital resources, which would not only support external motivation, but would help to form in students, as future specialists in the field of economics, internal motivation for in-depth study theoretical provisions of mathematical disciplines, as well as mastering mathematical methods and gaining practical experience in their application to solving real economic problems.

METHODOLOGY

During the 2020/2021 and 2021/2022 academic years, the performance of full-time students of the Simon Kuznets Kharkiv National University of Economics in the first and second years of study was monitored in terms of mastering mathematical disciplines in the conditions of remote learning. To ensure a full-fledged educational process, a wide range of digital resources of different levels of interactivity were used.

The virtual learning environment was created on the Moodle LMS platform, which is a fully customizable learning management system. Quantitative analysis of students' success, which was carried out throughout the educational process for each type of tasks, was combined with qualitative analysis, which was based on a questionnaire of students upon completion of the study of the discipline. The list of tasks to be completed by students during the semester was given in the course syllabus.

This syllabus also provides a rating scale for each type of task. Overall success was evaluated according to the cumulative system, for which a 100-point scale was used. All learning resources were posted on the website of the educational discipline of the personal educational systems of S. Kuznets KhNUE and have

been in open access for students since the very beginning of studies.

For a more detailed study, three academic groups of students of the 2nd year of the specialty Entrepreneurship, Trade and Stock Exchange Activity with a total number of 69 people were chosen. Monitoring their performance in the first year showed that the average performance in these three groups can be considered the same. In the second year, when studying the discipline Operations Research and Optimization Methods, great attention of the third group students was paid to interactive elements of learning, and instead of the usual homework, students passed tests and performed training exercises.

For students of the first and second (control) groups, traditional tasks from the textbook were offered. It should be emphasized that training of all these groups follows the same syllabus, and all students had full access to learning resources. In addition to the monitoring of student academic performance, monitoring of what types of resources students chose and for how long they used them was carried out. After the evaluation of the acquired knowledge and skills, which consisted of an ongoing assessment during the semester and a final assessment in the form of an exam, a student questionnaire was conducted in order to determine their own attitude to factors aimed at forming internal motivation to study. To process the results of the questionnaire (which is essentially an expert assessment), the method of vector preference will be used.

RESULTS

The experience of using the Moodle LMS for the organization of student learning is being accumulated at S. Kuznets KhNUE, starting from 2008. For correspondence

students, digital resources using Moodle LMS are already a familiar tool. It is on their using the independent work of students is built when studying by correspondence. But for full-time students, interactive learning has become actively used only in recent years, which was due to the COVID-19 epidemic.

Although some elements of interactivity (for example, tests, exercises for self-checking, business games) were also used in the process of teaching to one extent or another, but this was not mandatory and completely depended on the teacher's preferences. As a rule, for full-time students, digital resources mainly contained reference information.

However, in quarantine conditions, to ensure the effectiveness of training, it was necessary to use such learning digital resources that would contribute to the active involvement of the student in the learning process itself. Moodle LMS provides great opportunities for adapting the educational process to the distance format at all levels - from content creation to assessment of acquired knowledge. Each teacher has the opportunity to create his own website, on which to present a complex of digital resources in a digital format.

The following structure of the complex of the digital resources was proposed for mathematical disciplines. It contained a syllabus, a detailed work program of the academic discipline, a work plan (technological map) with a rating scale for each task, a list of recommended literature, links to useful Internet resources, lecture materials and their presentations, methodological materials for practices and labs, sets of homework, sample tasks of control works, training exercises, test tasks for self-diagnosis, multimedia publications, which are the authors' own development in co-

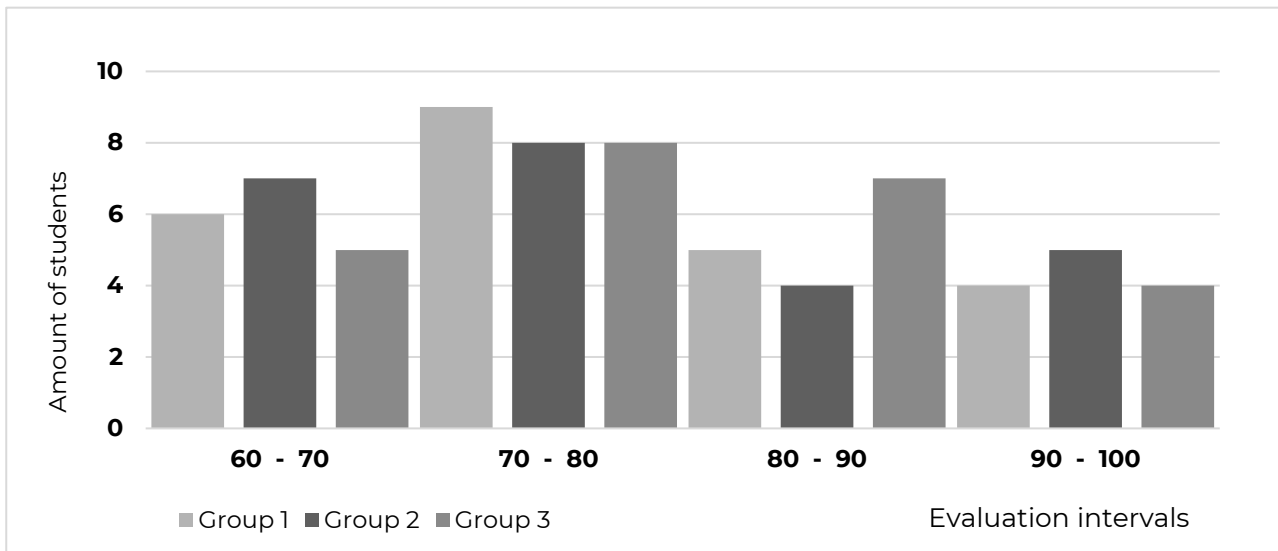
authorship with by other teachers of the department, as well as materials and resources for online final control (exam). It should be emphasized that one of the advantages of such electronic complexes is the ability to quickly update them.

According to the results of monitoring the academic performance of students of the first year of study, three academic groups were selected who study under the same program and whose success in

mathematical disciplines can be considered the same on average. These students participated in a detailed exploration. The average level of academic performance of the students of these three groups based on the results of the evaluation of the disciplines of the mathematical cycle studied in the 1st year (Higher Mathematics, Probability Theory and Mathematical Statistics) is 73-76 points on the ECTS scale (Fig. 1).

Figure 1

Distribution of academic success of students of the explored groups according to the results of studies in the disciplines of Higher Mathematics and Theory of Probabilities and Mathematical Statistics



Therefore, the sample population of students can be considered homogeneous according to the initial level of knowledge, which is the necessary condition for the purity of the experiment regarding the results of the introduction of interactive components into the educational process. The hypothesis to be tested is the positive impact of the implementation of digital resources in the education on the success of students due to the formation of both external and internal motivation to study.

Let's consider the factors affecting the external motivation of students. To ensure it, the system of automated current control was used, which is part of the complex of digital resources. This control system has two levels of adjustment. At the administrator level, the time when the student was on the website and which resource he uses are automatically recorded.

At the teacher level, the system allows monitoring attendance at classes, completion of mandatory tasks and self-

monitoring tasks. At this level, the system has the form of an electronic journal, in which the teacher assigns points for completed tasks according to the technological map. In addition, the rating of each student is automatically

determined among those students assigned to the academic discipline (academic stream). In fig. 2 shows an example of a current control page in an electronic journal.

Figure 2

View of the own student' page of the electronic journal of the current monitoring of the success in the academic discipline Operations Research and Optimization Methods

| | | | |
|--|-------------|--------------|-------------|
| Homework on topics 1-3 | 3.0 | 0-3 | 1/69 |
| Homework on topics 5-8 | 3.0 | 0-3 | 1/69 |
| Homework on topics 9-10 | 2.9 | 0-3 | 4/69 |
| Laboratory works №1-3 | 6.0 | 0-6 | 1/69 |
| Laboratory works №4-6 | 6.0 | 0-6 | 1/69 |
| Control work №1 | 7.9 | 0-8 | 1/69 |
| Control work №2 | 3.0 | 0-4 | 11/69 |
| Control work №3 | 3.6 | 0-4 | 2/69 |
| Colloquium №1 | 6.3 | 0-8 | 8/69 |
| Colloquium №2 | 3.3 | 0-8 | 42/69 |
| Independent creative work | 7.0 | 0-7 | 1/69 |
| Exam | - | 0-40 | - |
| Σ Course total Include empty grades. | 53.7 | 0-100 | 3/69 |

The left column of numbers corresponds to the points the student received for each current assignment, the center one is the range of points that can be obtained for that assignment, and the right one is the student's ranking among the total number of students in the stream (fig. 2).

Every student in the group has access to the electronic journal. The presence of the electronic journal configured in this way gives impetus to the formation of external motivation for the student not only from the teacher's side, but also from the side of other students, as it creates conditions for open competition between students, healthy competition, which strengthens the personal desire to get a better grade. In addition, establishing a rating for each

student personally contributes to the activation of his social desire to fulfill his obligations to his parents, in case the student studies under a contract, or seeks to receive a scholarship, which is assigned depending on the student's position in the rating.

Let us now consider the measures that were taken to develop students' internal motivation. Online (in synchronous mode), the educational process for students of both the experimental and control groups was built as follows. Students receive basic theoretical information during lectures, and practical skills are formed by studying typical examples and discussing situational tasks that took place on practices and labs. Also, students improve

their knowledge during independent work thanks to the completion of a set of specially designed tasks.

These tasks involve independent mastering of mathematical methods for solving economic problems of various levels of complexity. The results of independent work were discussed on practices and labs. Since the ability to make responsible and informed decisions in the future professional activity depends on the desire to study independently, the question of finding effective factors influencing the formation of their internal motivation to study arises precisely at the stage of engaging students in active independent work.

Practical and laboratory classes for the 1st and 2nd (control) groups were conducted online in the usual format using traditional methods and techniques of teaching. Students of these groups were recommended printed publications (textbook, manuals, and methodical recommendations), electronic publications (similar to paper publications in pdf format) and other useful links as

educational material that should be used during tasks for independent work.

They also had free access to the website of the discipline, where the full complex of digital resources was presented, and, accordingly, they could use all resources, but the use of interactive elements of these resources was not mandatory for them.

For students of the 3rd (experimental) group, practical and laboratory classes were conducted in the mode of active use of interactive technologies. For example, although lectures were given for the academic stream in a traditional format, along with this, mini-lectures of a debatable nature were held for students of the 3rd group in practical classes. These lectures were accompanied by specially designed audio presentations. Such mini-lectures were presented by the students themselves, while the teacher played the role of a moderator. Also, during the classes, an express survey was conducted in the format of closed-type or open-type interactive tests (Fig. 3).

Figure 3

An example of an open-type test task on the topic "Simplex method"

By what value will the objective function decrease when switching to a new basic solution?

| Basis | Cb | Cj | -6 | -2 | 0 | 0 |
|------------------------|----|----|----|----|----|----|
| | | bj | x1 | x2 | x3 | x4 |
| x3 | 0 | 8 | 2 | 3 | 1 | 0 |
| x4 | 0 | 12 | 1 | 7 | 0 | 1 |
| Zj | | 0 | 0 | 0 | 0 | 0 |
| $\Delta_j - Z_j - C_j$ | | | 6 | 2 | 0 | 0 |

Answer

Interactive training exercises were developed to master mathematical methods and apply them to solving economic problems. They allowed

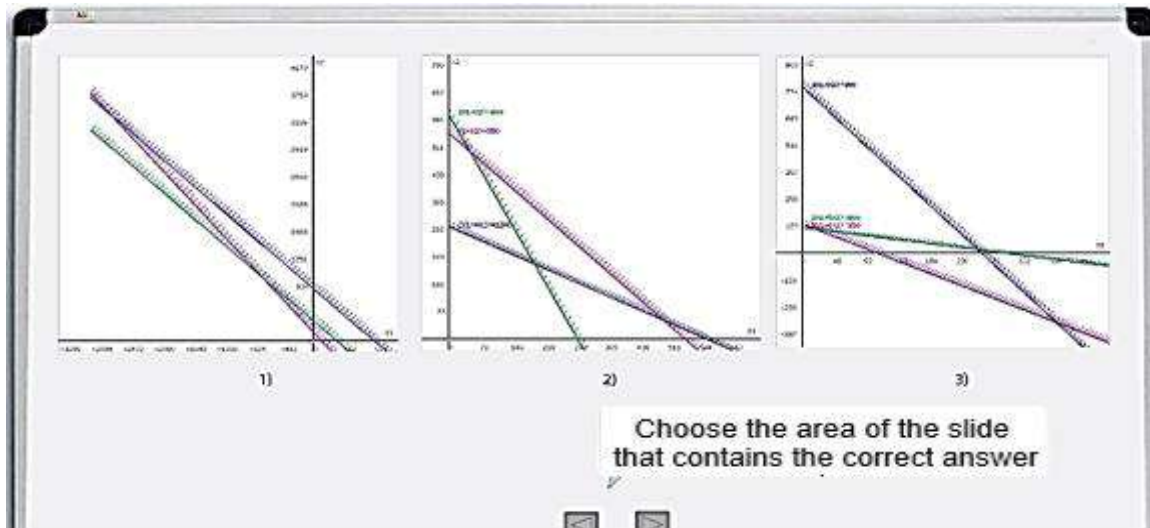
checking all key points during the solution process, and in the case when a mistake was made, hints were automatically turned on that helped to find the right way

(Fig. 4). The development of such exercises was carried out both in practical classes and during independent work based on

the materials of electronic multimedia publications.

Figure 4

A fragment of a training exercise on the topic "Graphic method of solving linear programming problems"



In the laboratory classes, which were held in the same format for all academic groups, applied economic problems were solved with the help of built-in functions and MS Excel add-ons. But homework in the control group additionally included performing interactive test tasks of a combined type, namely closed, open tasks and essays.

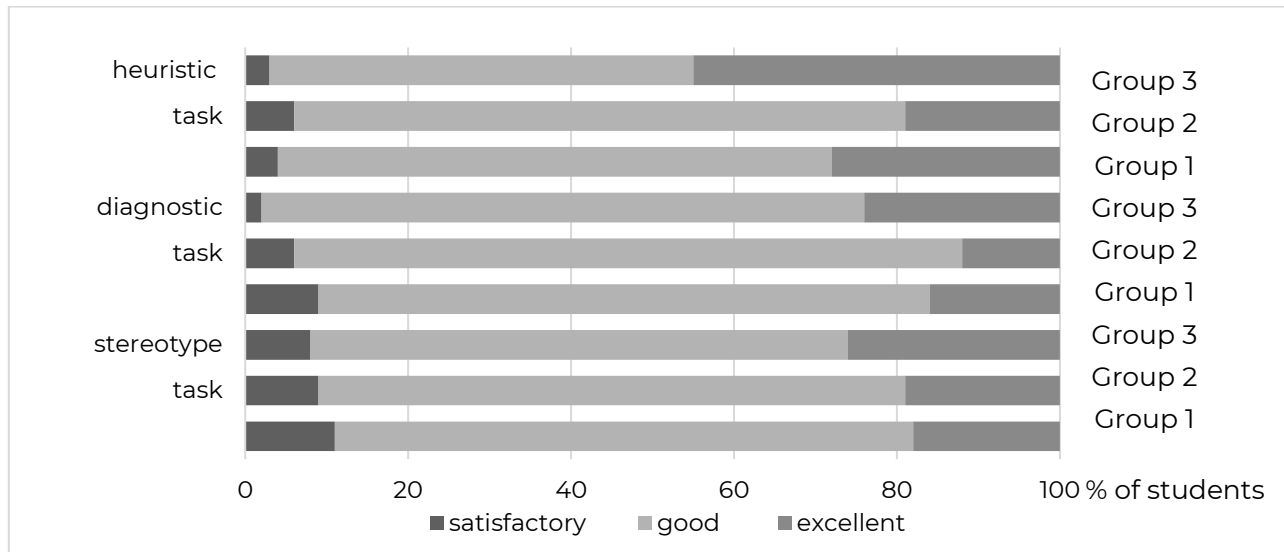
In order to perform the tasks of independent work, the students of the experimental group were recommended to additionally use the material of multimedia publications in the discipline "Operations Research and Optimization Methods" in addition to the general educational literature. All students of the university have access to these digital resources, as they are placed not only on the teacher's website, but also in the repository of electronic publications of S. Kuznets KhNUE. But the realization of tasks according to these resources was mandatory only for the students of the experimental group.

The final control of acquired knowledge was carried out in the form of an exam. Students had to complete five tasks. Among them, there were two stereotypes, which demonstrate only the level of assimilation of basic concepts and the ability to use standard algorithms for solving; two diagnostic, which have a meaningful statement of the economic problem and require the construction of a mathematical model and the determination of the optimal solution; one heuristic task is an economic problem with real data, which involves choosing and justifying a solution method and checking alternative options. Students of all groups coped with the tasks (Fig. 5).

However, the students of the experimental group provided more complete and well-grounded answers to heuristic tasks, demonstrated a clear understanding of the material, creativity, autonomy, and creative abilities, and obtained better results.

Figure 5

Evaluation diagram of each of the exam tasks



In order to determine the attitude of students of the experimental group to study and their level of interest, students were asked to evaluate the digital resources in the context of their influence on the formation of the most important factors of internal motivation to study.

Among the factors proposed by the students, the following were highlighted: x1 – formation of creative cognition methods, x2 – acquisition of scientific and

research skills in future professional activity, x3 – acquisition of new knowledge and practical skills in the academic discipline, x4 – realization of individual abilities, x5 – opportunities to show personal initiative, x6 – optimization of training time. Students, acting as experts, assigned ranks to each factor of internal motivation, based on their personal perception of their importance and implementation thanks to the active use of digital resources (Table 1).

Table 1

Ranks of factors of students' internal motivation to study

| Number of the expert | Ranks of factors | | | | | |
|--------------------------------|------------------|----------|----------|----------|----------|----------|
| | x1 | x2 | x3 | x4 | x5 | x6 |
| 1 | 2 | 1 | 3 | 5 | 4 | 6 |
| 2 | 1 | 3 | 2 | 4 | 6 | 5 |
| ... | ... | ... | ... | ... | ... | ... |
| 23 | 2 | 1 | 4 | 3 | 6 | 5 |
| 24 | 1 | 2 | 3 | 4 | 5 | 6 |
| Sum of ranks | 52 | 49 | 45 | 111 | 125 | 122 |
| Average arithmetic rank | 2.2 | 2.0 | 1.9 | 4.6 | 5.2 | 5.1 |
| Final rank | 3 | 2 | 1 | 4 | 6 | 5 |

To form a generalized assessment of a group of experts, their answers were averaged, determining the average arithmetic ranks. So, in the opinion of students, the factors that contribute to the formation of internal motivation, in order of decreasing importance, can be presented in the form of a series:

$$x_3 > x_2 > x_1 > x_4 > x_6 > x_5 \quad (1)$$

So, according to the students who studied using interactive technologies, the most influential factor of internal motivation is the acquisition of new knowledge and practical skills, that is, students are really interested in learning, and not just in evaluating their results from the teacher.

DISCUSSION

Thanks to the ability to determine the student's rating during the current control, the traditional system of success assessment is being modernized, reorientation of this system to increase the motivation in active and responsible learning. The competitive approach promotes the development of self-assessment skills as a means of self-development, creating conditions for students to plan individual educational trajectories. Such evaluation of students' success is a sufficiently effective factor not only of external, but also of internal motivation.

Thus, theoretical provisions (Domenico, & Ryan, 2017) regarding the organization of motivation levels were practically implemented. If for most students of the control groups, motivation was external, then thanks to the implementation of interactive technologies for students of the experimental group, motivation was internal, and its basis was the cognitive component that is consistent with thought (Schunk, Meece, & Pintrich, 2014).

It is internal motivation that is the driving force for increasing the effectiveness of

training, as evidenced by the results of the current and final control. Multimedia technologies contributed to a better development of one's own educational space compared to digital resources discussed in the paper (Gurevich, Kademiya, & Shevchenko, 2012), and this created more comfortable conditions for learning.

Our experiment is an example of the development of separate theoretical propositions regarding the influence of information technologies on the educational process (Cole, Field, & Harris, 2004) and its development, respectively to modern requirements of society. Thus, it is confirmed that the digitalization of the educational process activates the theoretical-cognitive and research activity of students, which affects the formation of their ability to comprehensively analyze different views and to clear arguments in the course of substantiating their conclusions.

CONCLUSIONS

A comparison of the results of the assessment of students' academic performance with the results of their questionnaire regarding the effectiveness of educational technologies, which determine the formation of internal motivation in the conditions of distance learning, shows that the use of digital resources provides an opportunity for future economists and managers to successfully master the disciplines of mathematical direction.

The main factors that increase the effectiveness of education are the formation of a tendency to creative cognitive search, the acquisition of skills for analyzing and solving real problems of the economy, the disclosure of individual abilities, and the creation of a comfortable educational space. It should be noted that

the experiment participants' awareness of their role and the teacher's increased attention to them are also additional factors of motivation.

In further research, it is planned to extend the use of digital resources to other mathematical disciplines, as well as to consider the use of such an element of interactivity as gamification in the analysis of real economic problems.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Börnert-Ringleb, M., Casale, G., & Hillenbrand, C. (2021). What Predicts Teachers' Use of Digital Learning in Germany? Examining the Obstacles and Conditions of Digital Learning in Special Education, *European Journal of Special Needs Education*, 36(1), 80-97. <https://doi.org/10.1080/08856257.2021.1872847>
- Bykov, V., Spirin, O., & Pinchuk, O. (2020). Suchasni zavdannia tsyvrovoi transformatsii osvity [Modern Tasks of Digital Transformation of Education]. *Bulletin of the UNESCO Chair "Continuing Professional Education of the XXI Century"*, 1, 27-36. [https://doi.org/10.35387/ucj.1\(1\).2020.27-36](https://doi.org/10.35387/ucj.1(1).2020.27-36) [in Ukrainian].
- Cole, M.S., Field, H.S., & Harris, S.G. (2004). Student Learning Motivation and Psychological Hardiness: Interactive Effects on Students' Reactions to a Management Class. *Academy of Management Learning & Education*, 3(1), 64-85. <https://doi.org/10.5465/amle.2004.12436819>
- Dutta, S., Lanvin, B., & Wunsch-Vincent, S. (Eds.). (2020). *Global Innovation Index 2020: Who Will Finance Innovation?* Cornell University, INSEAD, and the World Intellectual Property Organization. <https://www.insead.edu/sites/default/files/assets/dept/globalindices/docs/GII-2020-report.pdf>
- Gurevich, R.S., Kademiya, M.Yu., & Shevchenko, L.S. (2012). *Informatsiini tekhnolohii navchannia: innovatsiinyi pidkhid* [Information Technology Training: Innovative Research]. Vinnitsa, TOV firm "Planer" [in Ukrainian].
- Kukharenko, V.M., & Bondarenko, V.V. (2020). *Ekstrene dystantsiine navchannia v Ukraini* [Emergency Distance Learning in Ukraine]. Kharkiv: Vyd-vo KP "Miska drukarnia" [in Ukrainian].
- Jackson, E. A. (2021). Efficacy of Virtual Technology as the Way Forward for Teaching and Learning with the Experience of a Global Pandemic. *Educational Challenges*, 26(2), 6-12. <https://doi.org/10.34142/2709-7986.2021.26.2.01>
- Modlo, Ye.O., Semerikov, S.O., Bondarevskyi, S.I., Tolmachev, S.T., Markova, O.M., & Nechypurenko, P.P. (2020). Methods of Using Mobile Internet Devices in the Formation of the General Scientific Component of Bachelor in Electromechanics

Competency in Modeling of Technical Objects. In *CEUR Workshop Proceedings*, 2547 (pp. 217–240). <http://ceur-ws.org/Vol-2547/paper16.pdf>.

- Morze, N., Varchenko-Trotsenko, L., Terletska, T., & Smyrnova-Trybulska, E. (2021). Implementation of Adaptive Learning at Higher Education Institutions by Means of Moodle LMS. *Journal of Physics: Conference Series*, 1840, 012062. <https://doi.org/10.1088/1742-6596/1840/1/012062>
- Nahaev, V., & Hrynova, Y. (2020). Pedagogical Model of Organization of Distance Teaching and Learning in the Conditions of Network Technology of Students' Educational and Creative Activity Management. *Educational Challenges*, 25(1), 82–95. <https://doi.org/10.34142/2709-7986.2020.25.1.07>
- Proekt: Tsyfrova adzhenda Ukrainy – 2020* (Tsyfrovyi poriadok denni – 2020) [Project: Digital Agenda of Ukraine – 2020]. <https://ucci.org.ua/uploads/files/58e78ee3c3922.pdf> [in Ukrainian]
- QS Quacquarelli Symonds. (2018). *QS Higher Education System Strength Rankings*. <https://www.topuniversities.com/system-strength-rankings/2018>.
- Rahiem, M.D.H. (2020). Technological Barriers and Challenges in the Use of ICT During the COVID-19 Emergency Remote Learning. *Universal Journal of Educational Research*, 8(11B), 6124–6133. <https://doi.org/10.13189/ujer.2020.082248>
- Rahiem, M.D.H. (2021). Remaining Motivated Despite the Limitations: University Students' Learning Propensity during the Covid-19 Pandemic. *Children and Youth Services Review*, 120, n.d. <https://doi.org/10.1016/j.childyouth.2020.105802>
- Reforma osvity ta nauky [Education and Science Reform] (2020). <https://www.kmu.gov.ua/diyalnist/reformi/rozvitok-lyudskogo-kapitalu/reforma-osviti>. [in Ukrainian].
- Schunk, D.H., Meece, J.R., & Pintrich, P.R. (2014). *Motivation in Education: Theory, Research, and Applications*. Boston: Pearson.
- Shakhina, I.Yu. (2017). Orhanizatsiia osvitnoho protsesu z vykorystanniam elektronnykh navchalno-metodychnykh kompleksiv dlia pidhotovky fakhivtsiv z kompiuternykh tekhnolohii [Organization of the Educational Process with the Use of Educational and Methodical Complexes for the Training of Specialists in Computer Technology]. *Informatsiini tekhnolohii i zasoby navchannia*, 58(2), 141–154. <https://doi.org/10.33407/itlt.v58i2.1568> [in Ukrainian].
- Stratehiia rozvytku vyshchoi osvity v Ukraini na 2021 – 2031 roky* [Strategy for the Development of Higher Education in Ukraine for 2021 – 2031]. Kyiv: Ministerstvo osvity i nauky, 2020. <https://mon.gov.ua/storage/app/media/rizne/2020/09/25/rozvitku-vishchoi-osviti-v-ukraini-02-10-2020.pdf> [in Ukrainian].
- Trius, Yu.V., Zaspa, G.O., Kozhemyakin, O.S., & Ashirova, A.V. (2021). Informatsiino-analitychna systema pidtrymky osvitnoi diialnosti strukturnykh pidrozdiliv zakladiv vyshchoi osvity [Information-Analytical System of Support of Educational Activity of Structural Subdivisions of Higher Education Institutions]. *Visnyk Cherkaskoho*

derzhavnoho tekhnolohichnoho universytetu, 4, 27–38.
<https://doi.org/10.24025/2306-4412.4.2020.219482> [in Ukrainian].

Ullah, A., & Anwar, S. (2020). The Effective Use of Information Technology and Interactive Activities to Improve Learner Engagement. *Educ. Sci.*, 10(12), 349.
<https://doi.org/10.3390/educsci10120349>

Vermunt, J., & Donche, V. (2017). A Learning Patterns Perspective on Student Learning in Higher Education: State of the Art and Moving Forward. *Educational Psychology Review*, 29(2), 269–299. <https://doi.org/10.1007/s10648-017-9414-6>

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

МОТИВАЦІЯ СТУДЕНТІВ ЕКОНОМІЧНИХ СПЕЦІАЛЬНОСТЕЙ ДО ВИВЧЕННЯ МАТЕМАТИЧНИХ ДИСЦИПЛІН ПРИ ВПРОВАДЖЕННІ ЦИФРОВИХ РЕСУРСІВ

Метою роботи є аналіз технічних, методичних та психологічних аспектів діджиталізації освіти та, зокрема, методів забезпечення ефективності самостійної роботи студентів в умовах дистанційного навчання. Основна увага приділяється проблемі формування зовнішньої і внутрішньої мотивації студентів економічних спеціальностей до вивчення дисциплін математичного спрямування завдяки використанню інтерактивних освітніх технологій.

Методика: в умовах електронного навчання здійснювався безперервний моніторинг успішності оволодіння студентами математичними методами та їх застосуванням для розв'язування економічних задач. Визначалась як успішність студента при виконанні певної роботи, так і його загальний рейтинг серед інших студентів групи. Ці дані доповнювались результатами анкетування студентів стосовно їх власного ставлення щодо інтерактивних технологій як інструменту, спрямованому на формування мотивації до навчання.

Результати: віртуальне середовище для е-навчання було побудовано на платформі Moodle LMS і містило цифрові освітні ресурси різного рівня інтерактивності, у тому числі й електронні мультимедійні видання, що у повному обсязі забезпечувало потреби освітнього процесу. Для формування зовнішньої мотивації студента автори використовували електронний журнал, в якому визначені види поточних завдань, бали за їх виконання, рейтинг студента за кожним видом завдань, а також за всіма видами завдань у цілому. Для підтримки внутрішньої мотивації були розроблені та впроваджені інтерактивні елементи навчання. Ефективність застосування цифрових освітніх ресурсів була підтверджена в ході моніторингу успішності студентів та за результатами їх анкетування.

Висновки: суттєвою перевагою застосування інтерактивних компонентів у навчальному процесі слід вважати створення засад для кращого розуміння теоретичного матеріалу та застосування використання математичного апарату для розв'язання реальних

економічних завдань. Використання багаторівневих цифрових освітніх ресурсів дає можливість студентів вибудовувати індивідуальне освітнє середовище, що підвищує внутрішню мотивацію до навчання.

KEYWORDS: цифрові освітні ресурси; електронне мультимедійне видання; індивідуальне освітнє середовище; дистанційне навчання; зовнішня і внутрішня мотивація.

CITE THIS ARTICLE AS (APA style):

Lebedeva, I., Norik, L., & Lebedev, S. (2022). Digital Resources as a Way to Increase the Motivation of Economic Specialties Students in Studies of Mathematics. *Educational Challenges*, 27(2), 105-121. <https://doi.org/10.34142/2709-7986.2022.27.2.08>



<https://doi.org/10.34142/2709-7986.2022.27.2.09>

CONCEPT CONTENT AND STRUCTURE OF SELF-EDUCATIONAL COMPETENCE OF SCHOOL STUDENTS IN THE MODERN EDUCATIONAL SPACE

Received: 31/08/2022

Accepted: 30/09/2022

Iryna MAISTRIUK¹, & Nataliia PONOMAROVA²



¹ Ph.D. Student, Department of Education and Innovative Pedagogy, H.S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.


✉ E-Mail: irinka192702@hnpu.edu.ua

 <https://orcid.org/0000-0002-8187-0141>



² Doctor of Pedagogical Sciences, Professor, Professor at the Department of Informatics, Dean of the Faculty of Physics and Mathematics, H.S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.

✉ E-Mail: ponomna@gmail.com

 <http://orcid.org/0000-0002-0172-8007>

ABSTRACT

The **purpose** of the article is to characterize the self-educational competence as a key one in the modern educational space and reveal the essence and distinguish the structural components of the self-educational competence of school students.

Methodology. The study used the terminological analysis, it provided the development of the competence approach concepts, the competence, the self-educational competence; the general scientific method facilitated the analysis and systematization of scientific and methodological literature (regarding the study of the competence approach concept and approaches to determining the self-educational individual competence); the comparative method was the basis for comparing the interpretation of the essence of students' self-education.

© Iryna MAISTRIUK, & Nataliia PONOMAROVA, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

Results. *In the course of the study, such concepts as "competence approach", "competence", and "self-educational competence" were analyzed as key ones. Approaches to the self-educational competence interpretation for schoolchildren (activity, personal and integrative ones) are highlighted and summarized. The views on understanding the structure of the self-educational competence for schoolchildren are systematized and compared. The refined definition of the self-educational competence for schoolchildren based on the integrative approach is proposed. The conducted analysis of psychological and pedagogical research provides the grounds for delineating the components of self-educational school students' competence.*

Conclusions. *The self-educational competence of a school student is understood as a personality's integrated quality, which is determined in a certain way by systematized knowledge, self-educational abilities, and skills, by a focus on life-long learning, motives, and aspiration for self-educational activities, self-control skills and reflection, self-evaluation of educational activities. The structural components of school students' self-educational competence are motivational-value, substantive-procedural, and control-reflective.*

KEYWORDS: *Competence, Competence Approach, Self-Education, Self-Educational Activity, Self-Educational Competence, Self-Development.*

INTRODUCTION

Education around the world is undergoing significant changes and reforms. This process is aimed, in particular, at forming the ability of graduates of public secondary education institutions to learn independently throughout their lives.

The self-educational competence as a phenomenon in philosophical and sociological perspectives was studied by O. Burluka (2005), L. Hrynevych (2016), O. Kovalova (2018), V. Osodlo (2010) and others; the pedagogical aspect of the self-educational competence is revealed in the works by L. Bilousova (2019), N. Bukhlova (2008), N. Burba (2018), N. Dovmatovych (2014), M. Dubinka (2019), V. Haida (2019) and others.

The formation of the self-educational personality's competence is a complex, multi-stage and long process that begins during the period of schooling. This period

is practically unexplored from this point of view.

Therefore, it is important to update and revise the theoretical foundations of the formation of self-educational competence, first of all, its essence and structure, taking into account the new conditions of the functioning of the educational system.

The **purpose** of the article is to characterize the self-educational competence as a key one in the modern educational space and reveal the essence and distinguish the structural components of the self-educational competence of school students.

METHODOLOGY

The study used the terminological analysis, it provided the development of the competence approach concepts, the competence, and the self-educational competence; the general scientific

method facilitated the analysis and systematization of scientific and methodological literature (regarding the study of the competence approach concept and approaches to determining the self-educational competence of an individual); the comparative method was the basis for comparing the essence interpretation of students' self-education.

RESULTS

Current science and educational practice prove the relevance of the problem of self-education of school students, which lays the foundations for the formation of the ability to lifelong learning based on the competence approach.

It is crucial to consider *the idea of the competence approach* as the basis for building a modern educational process.

The competent approach is the methodology of designing a modern educational space both in Ukraine and in other countries of Europe and the world. The relevance of the idea of introducing a competency-based approach to the construction of the educational process in institutions of general secondary education is that in the complex modern world it is not enough for school graduates to have only knowledge – they must use it.

Competence-based education aims to comply with the personal, social, professional, and cultural needs of modern society. With this direction, there is a transition from the traditional approach (centred on teaching) to education, focused on learning, where the centre of the learning process is students (Ovcharuk, 2004).

The main idea of the competency-based approach is “the implementation of the activity-based nature of the education content, as a result of which the student turns from an object into a subject of

learning, and develops himself/herself as a person” (Hrybanova, 2019).

An analysis of the main provisions of the competency-based approach shows that it differs significantly from the traditional knowledge of the first one in all aspects of the educational process organization because there is a clear emphasis on the effective training of students and a focus on changes in students as a subject of learning in a competent approach.

In Ukraine, one of the basic components of the current innovative education reform formula of “New Ukrainian School” is the new content of education, based on the formation of competencies necessary for the successful further self-realization of school graduates in society. The concept of the reform of “New Ukrainian School” details the general idea of reforming the education system, laid down in the new current basic law “On Education”.

Competence as a result of learning is defined by the State Standard for Basic and Complete General Secondary Education, where personality-oriented, competence-based, and activity-based approaches are recognized as priorities and implemented in the educational industry as components of the content of general secondary education. The competency-based approach requires changing the orientation of the educational process towards its results. The results are key, interdisciplinary, and subject competencies that are hierarchically subordinated (Liskovych, 2014).

The concept of “competence” is one of the most widespread and popular pedagogical categories in foreign and Ukrainian science. The theoretical foundations of the competence approach in education were laid in the 50s and 60s of the 20th century in the United States of

America for the business needs and entrepreneurship development.

As the researchers note, the term “competence” was first proposed by K. Landberh in the work “Planning the Program for the Development of Administrators”, and after that, the concept was supported by D. McClelland in the work “Testing to Identify Competence, and Not Mental Abilities” (Avsheniuk et al, 2014)

It is important to analyze the *modern concepts of competence and the self-educational competence as key competences*.

The scientific works by O. Lokshyna (2014), A. Mack (2001) and many others are devoted to the historical aspect of the formation of the concept of “competence”.

According to P. Hager, the following evolutionary stages can be distinguished in the understanding of the concept of competence by world scientists: from interpretation of the competence as a demonstration of an activity to a view of competence as certain skills of a general type that will determine the nature of activities or how actions will be performed, and after that to the interpretation of competence as a property that requires a person to have not only abilities and skills, but also intellectual, moral, and social qualities to carry out activities (Lokshyna, 2014).

Since competence is characterized as a combination of knowledge, skills, and attitudes in the relevant context of human activity, and key competence is that which is formed primarily for personal development, active citizenship, social integration, and employment, then key competences have both high personal and exceptional social value (Savchenko, 2011).

It is believed that the impetus for the establishment of key competencies was the recommendations of the World Declaration on Education for All “Toward Basic Educational Needs” (Thailand, 1990), which emphasized the interaction of knowledge, skills, motivation, values, and attitudes in the assimilation of important social and behavioural skills by a personality (Savchenko, 2011).

Already in 1996, UNESCO’s report on education for the 21st century formulated four value directions along which education should develop: the ability of people to live together, the ability to learn, the ability to act, and the ability to be.

In the late 1990s, the Council of Europe offered educators a list of five groups of key competencies that young Europeans should possess, including “the ability to learn – as a basis for learning in professional and social contexts”. For school (primary, secondary), it was suggested to form seven groups of students’ key competencies, including general skills – also the ability to learn. (Savchenko, 2011).

In 2005, the reference system of key competencies, which covers eight competencies was defined by the European Union taking into account the existing experience of competence education and the prospects of school development in the 21st century including the ability to learn too (Ovcharuk, 2004).

The conducted analysis by foreign modern researchers (Austria, Germany, Great Britain, France, Poland etc) shows a special place among the list of key competences of self-education, which in the modern educational space acquires a new interpretation, weight, and significance (Mack, 2001).

According to the Concept of the New Ukrainian School, this is the ability to find and assimilate new knowledge, acquire new abilities and skills, and organize the educational process (one's own and collective), in particular through the effective management of resources and information flows, the ability to determine educational goals and ways to achieve them, build one's educational trajectory, evaluate own learning results, learn throughout life.

The ability for lifelong learning is formed in the self-educational activity of school students, which is a complex process, during which they independently set cognitive goals and tasks, determine the ways to achieve them, control the progress of independent work with the acquisition of knowledge and improve results, and requires the formation of self-education competence (Kovalenko, 2009).

The concept of the self-educational competence of school students is closely related to the concepts of "self-development" and "self-education".

Self-development is a conscious and personally controlled process, which results in the improvement of a person's physical, mental, and moral potential, and the development of his or her personality (Kudryk, 2020).

Self-education in psychological and pedagogical studies is considered a purposeful and independent cognitive activity to satisfy the interests and needs of a person in learning about the surrounding world. In self-education, a person sets cognitive goals and tasks for himself, determines the ways to achieve them, monitors the progress of independent work on acquiring knowledge, and evaluates its results (Burba, 2018).

The study of the problems of personal self-education is closely related to philosophical research and, above all, to the provisions of the philosophy of knowledge as the theoretical basis of personal self-education. In this perspective, the development of the philosophical foundations of self-education is also one of the practical tasks of the philosophy of education, as it is described as a process of cognition, the goal of which is the personality's self-realization (Burluka, 2005).

Modern studies of the problems of self-education from the point of view of philosophy are presented in the works by O. Burluka (2005), O. Lokshyna (2014), S. Roi (2015), and many others. The analysis of scientific literature shows that the question of self-education as a philosophical category is relevant from different points of view. A digital society person of the third millennium must not only flexibly adapt to new challenges, constantly changing circumstances, and situations of uncertainty for self-realization throughout his life, but must also constantly and independently acquire new knowledge, skills, and abilities to solve various personal, life, and professional problems.

Scientists interpret self-education as a specific, free activity to provide knowledge, and information about other types of activities, as a form of satisfying cognitive needs (Khatuntseva, 2014).

At the same time, philosophers often characterize self-education as a cognitive process, the aim of which is the personality's self-realization based on inner freedom (Dubinka, 2019).

As noted in scientific research, the need to realize that self-education is the way to creativity, self-expression and the

formation of a unique personality style in activity is overdue (Burluka, 2005).

Self-education is a product of personal creativity, and not a formal increase in knowledge, skills, and abilities. Self-education requires self-analysis, the study of one's qualities, awareness of one's strengths and weaknesses, and gradual formation of one's inner spiritual core.

So, in particular, in professional self-realization, self-education helps a personality to confirm his vocation to his favourite business, create and find new ways of doing things, and not only to use learned knowledge and old techniques. Therefore, in the process of self-education, the feeling of satisfaction from the acquired knowledge, the completed issue thing is a certain sign of its effectiveness.

Self-education activity is becoming more and more innovative in its essence, which is a social order of society with a person and a factor in his growth.

As the researchers note, the basis of a personality's self-education is a holistic complex of processes and means of its formation, satisfaction of its various cognitive and spiritual needs, disclosure, and development of aptitudes and capabilities.

As experts note, self-education is a complex process during which a person independently sets cognitive goals and tasks, determines ways to achieve them, monitors the progress of independent work with the acquisition of knowledge, and improves results (Maistriuk, & Ponomarova, 2021).

It should be noted that in the digital world, following all the directions outlined above, such forms and methods of self-education, which are based on the use of various means of information and communication

technologies, are becoming more and more widespread.

Thus, the formation of a person's self-educational competence becomes a guarantee of his/her success in life in modern society, both in the professional and the personal context, that corresponds to the interpreted goals of modern education.

Society requires the formation of the self-educational competence from each personality. Therefore, there is an urgent need to create such conditions for a personality, starting from school age, that will provide him with opportunities for self-education throughout his life.

The above analysis is the basis for clarifying the essence and components of the self-educational competence of schoolchildren in the modern educational space.

There are different views on *understanding the essence of self-educational competence, based on activity, personal and integrative approaches*.

The self-educational competence as a personality's readiness for independent, systematic, purposeful knowledge, mastering the social experience of humanity, self-realization, and self-development is considered by N. Dovmatovych (2014), O. Dubaseniuk (2010), L. Kudryk (2020), N. Stepanets (Stepanets, 2013), and others. In this sense, a personality's self-educational competence determines the ability or readiness for successful independent activity, for solving professional and private tasks to obtain the necessary results of professional and life activity.

From the point of view of N. Dovmatovych (2014), I. Ziaziun (2001), A. Zelnytskyi (2012), and others, the self-educational

competence appears in a person's quality, which is characterized by the ability for systematic, independently organized activities aimed at continuing one's education. Representatives of this approach consider competence as a certain quality or set of qualities that contribute to a personality's formation as a professional and determine the peculiarities of his professional activity.

Researchers understand the self-educational competence as the ability to life-long learning, the basis of continuous learning in the context of both personal and professional life. The scientist includes the following components of self-educational competence: the need for self-development; the ability to build a personal life strategy; the ability to structure, actualize, and accumulate knowledge; to reach the heights of professional skill and creativity; cope with the contradictions and uncertainties of one's life experience (Dovmatovych, 2014).

According to scientists, the self-educational competence, as a complex personal property, includes the ability to self-educate, and organize self-learning techniques; responsibility for the level of one's self-educational activity; flexibility in the application of knowledge, skills, and abilities in conditions of rapid changes; constant introspection, control of one's activities. The authors, outlining the components of students' self-educational competence, focus on their knowledge of cognitive methods, skills to work with educational and scientific information, reading skills, note-taking, etc. (Dovmatovych, 2014).

The self-educational competence is manifested in the qualities of a person that characterize his/her ability to systematic, independently organized activities aimed at continuing his education in general

cultural and professional aspects (Dovmatovych, 2014).

According to I. Preobrazhenska, the self-educational competence should be understood as the personal and professional quality of a modern specialist, which is manifested in his/her ability to self-initiated educational and developmental activities and is aimed at his/her general cultural and professional development, related to solving professional problems, replenishing knowledge, professional and life experience (Dovmatovych, 2014).

However, N. Bukhlova (2008), N. Kovalenko (2009), S. Roi (Roi, 2015), and others consider the self-educational competence as an integrative quality of the personality manifested in the presence of certain knowledge, abilities and skills, abilities and certain personal qualities.

O. Chebotarova defines the self-educational competence as an integrative personal quality, which is characterized by an emotional and valuable attitude to professional and personal self-development and independent activity, includes a system of knowledge about the methods of its implementation, subjective and personal experience of creatively solving problems of independent activity, readiness to develop and implementation of its models and reflection of the results of productive activity. At the same time, in the structure of self-educational competence, the scientists suggest distinguishing motivational, cognitive, emotional-volitional (personal), and content-procedural components (Dovmatovych, 2014).

N. Kovalenko characterizes the self-educational competence as a personality's integrated property (Kovalenko, 2009). It ensures readiness to satisfy personality

and social needs of knowledge of reality based on mastering knowledge, abilities, skills, methods of activity and acquired experience, to productively carry out independent systematic targeted development of the social experience of humanity. The self-educational competence, according to the scientist, is based on the skills of self-educational activity and presents the personality's readiness for self-education, self-learning, self-improvement, self-selection, and self-realization throughout life with an awareness of personal and social needs. At the same time, N. Kovalenko and other authors believe that the self-educational competence is formed only under the condition of productive educational and cognitive activity, the active position of students.

N. Bukhlova (2008) understands the self-educational competence as the integrated quality of a person. So, it is characterized by the presence of organized and structured knowledge in a certain way, self-educational abilities, and skills, motives, interest in self-improvement, the experience of self-educational activities, focus on life-long education, value orientations that allow it to successfully solve issues of self-realization, self-education, self-development.

The self-educational competence is interpreted as an integrated characteristic of a person (Bukhlova, 2008). It manifests as containing knowledge, abilities, skills, and experience of self-education, personal qualities that are manifested in the need, ability, and readiness to implement a certain type of activity aimed at achieving personal, professional and social self-realization of a person, is characterized by personal and professional values that determine the personality's readiness and

ability to successfully carry out self-education activities.

The self-educational competence is defined by scientists (S. Roi and others) as a personality's integrative quality, which is manifested in the ability for purposeful, independently organized educational activities, as well as in the presence of a certain set of knowledge, abilities, skills, and personal and professional experience.

The involvement of these approaches (activity, personal and integrative approaches) allows us to determine *the components of the self-educational competence* and to solve the problem of its purposeful formation.

The analysis of psychological-pedagogical research proves that scientists proposed to distinguish personality interdependent and mutually determining components in the structure of the self-educational competence, in each of which the mastery of modern tools for self-educational activity occupies an important place.

So, for example, N. Kovalenko (2009) singles out motivational and value components, organizational components, procedural components and as a separate informational component in the structure of the self-educational competence. The motivational and value component includes activity, aspiration, conscious personal instruction, and value orientation on self-improvement in the intellectual sphere. The organizational component includes building self-educational activity, purposefulness, concentration, self-management, and self-reflection in cognitive activity.

The procedural component includes self-management of the movement from the cognitive goal to the result using the self-organized cognitive range, functionality of knowledge, abilities and skills, and their

independent improvement. The informational component includes the ability and willingness to work with information and modern information technologies to meet the needs of one's self-education and self-realization.

L. Bilousova and O. Kyselova (2019) distinguish five components of the self-educational competence. They are: motivational and valuable; organizational; procedural-informational; information-analytical; technological; control-reflexive.

V. Haida (2019) singles out four components of self-educational competence: value and motivational, organizational and content, emotional-volitional, and control-reflective. The value-motivational component includes determining school students' awareness of learning goals, a deep understanding of the value of self-education and the cognitive focus of educational activity on intellectual development.

The organizational and content component includes determining students' ability to plan their own educational and cognitive activity and manage it, selecting appropriate types and methods of self-educational activity. The emotional-volitional component includes characterizing cognitive independence, volitional qualities, initiative and responsibility of the student. The control-reflective component includes the student's ability to control and reflect on educational activities, carry out self-analysis, form an adequate assessment of one's own achievements when solving complex tasks, compare the achieved results with the set tasks, and adjust and develop new tasks.

I. Mosia (2013) singles out four components of the self-educational competence. It is,

first of all, the motivational and valuable component (presupposes the presence of a personality's value orientations towards mastering modern knowledge, a passionate desire to complete the educational task, and the formation of the need for systematic educational and cognitive activity).

Another component is the practical-activity component (presupposes the selection of appropriate types and methods of independent work, the student's possession of "study skills"). The organizational component is the third (presupposes rational planning and design of one's actions and regulation of time for completing educational tasks, etc.). The personal-reflexive component is the fourth (directly related to cognitive independence, volitional and worldview qualities, initiative, responsibility, scientific thinking, and personal inspiration).

Table 1 shows the results of the comparative analysis of modern approaches to distinguishing the components of school students' self-educational competence.

DISCUSSION

So, the activity approach to understanding the essence of the self-educational competence of students in general secondary education institutions, in turn, focuses on the result of its formation and does not fully allow for investigating the components that acquire a certain specificity in the modern educational space. The application of the personal approach to the definition of self-educational competence, in our opinion, focuses attention on it as a separate quality and does not take into account its complex nature, complicating the learning process.

Table 1

Modern Approaches to Distinguish the Components of Self-Educational Competence of a Schoolchild

| The authors | Components of the Student's Self-Educational Competence | | | | |
|---|--|--------------------------|----------------------------|-----------------------|---------------------|
| N. Kovalenko | motivational & valuable | organizational | procedural | informative | - |
| L. Bilousova, & O. Kiselyova | motivational & valuable | organizational | procedural & informational | control-reflexive | |
| V. Haida | value-motivational | organizational & content | | control-reflexive | emotional & willful |
| I. Mosya | motivational & valuable | practical & active | organizational | personally reflective | |
| O. Savchenko | motivational | contentful | procedural | | - |

The integrative approach seems to be the most appropriate for application in the perspective of studying the problem of the self-educational competence of students of general secondary education institutions - because it reveals its components (in all their specificity and interrelationship), and allows scholars to systematically investigate the process of formation, develop criteria and indicators of formation.

In our opinion, it is possible to trace overlaps in the approaches to distinguishing the components of self-educational competence. Thus, scientists have identified components related to knowledge and skills, the motivational and value component, and the reflective component. At the same time, the approaches given in the discussion cannot be directly applied to students of general secondary education institutions, as they need to be clarified according to the period of their development.

CONCLUSIONS

Consequently, it is the competent approach that, in our opinion, allows us to provide both a theory and a solution to the

issue of purposeful formation of the self-educational competence of school students since it aims at the formation of an active personality, provides for the formation of content from the expected result, and provides for the productive construction of the educational process, the predominant component of which there will be practical and independent work of education seekers.

In the conditions of the modern educational environment, in our view, the problem of the formation of school students' self-educational competence will be most fully revealed by the integrative approach to its definition.

Based on these principles, the self-educational competence of a school student is understood as a personality's integrated quality, which is determined in a certain way by systematized knowledge, self-educational abilities, and skills, by focus on obtaining education throughout life, motives, and aspiration for self-educational activities, skills of self-control and reflection, self-evaluation of educational activities.

The conducted analysis of psychological and pedagogical research provides grounds for delineating the structure of the self-educational competence of a schoolchild of components that have motivational-value, substantive-procedural, and control-reflective content. The highlighted components, as evidenced by the results of the performed research, have a certain specific character, and their development should take place purposefully.

The clarification of the essence and selection of the structural components of the self-educational competence of the school student is the basis for further establishing both their content and the features of its formation in the educational process of general secondary education institutions in the modern educational space.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Avsheniuk, N.M., Desiatov, T. M., Diachenko, L. M., Postryhach, N. O., Pukhovska, L. P., & Sulyma, O.V. (2014). *Kompetentnisnyi pidkhid do pidhotovky pedahohiv u zarubizhnykh krainakh: teoriia ta praktyka* [A Competent Approach to the Training of Teachers in Foreign Countries: Theory and Practice]. Kirovohrad: Imeks-LTD [in Ukrainian].
- Bets, I.O. (2012). Pedahohichni umovy formuvannia naukovo-doslidnytskoi kompetentnosti maibutnikh ofitseriv-prykordonnykiv [Pedagogical Conditions for the Formation of Scientific and Research Competence of Future Border Guards]. *Naukovyi visnyk Uzhhorodskoho natsionalnoho universytetu. Pedahohika. Sotsialna robota*, 25, 35–38 [in Ukrainian].
- Bilousova, L.I., & Kyselova, O.B. (2019). Kompetentnist samoosvity maibutnoho pedahoha: vid teorii do praktyky. Kharkiv [in Ukrainian].
- Boiko, O.V. (2013). Sutnist formuvannia liderskoi kompetentnosti maibutnikh ofitseriv u VVNZ [Essence Development of Leadership Competence of Officers in HMEI]. *Viiskova osvita: zb. nauk. pr. Natsionalnoho universytetu oborony Ukrainy*, 2, 32–42 [in Ukrainian].
- Borovynska, I.Ye. (2017). Do psykholohichnoho rozuminnia poniat «uspikh», «uspishnist», «zhyttievyi uspikh», «zhyttieva uspishnist» [To the Psychological Understanding of The Notion "Success", "Successfulness", "Life Success", "Life Successfulness"]. *Naukovyi visnyk Khersonskoho derzhavnoho universytetu. Seriia "Psykholohichni nauky"*, 3(2), 142-148. <https://journals.indexcopernicus.com/api/file/viewByFileId/507394.pdf>

- Bryukhanova, H. (2022). Analysis of Basic Education Concepts in Ukraine and Canada (in the Field "Advertising and Public Relations"). *Educational Challenges*, 27(1), 47-56. <https://doi.org/10.34142/2709-7986.2022.27.1.04>
- Bukhlova, N.V. (2008). Sutnisnyi zmist poniattia «Samoosvitnia kompetentnist» [Essential Content of the Concept of "Self-Educational Competence"]. *Naukova skarbnitsia osvity Donechchyny*, 1, 4 [in Ukrainian].
- Burba, N.O. (2018, August 2). *Formuvannia samoosvitnoi kompetentnosti uchniv – ody z naivazhlyvishykh faktoriv uspishnoho navchannia* [Formation of Self-Educational Competence of Students is One of the Most Important Factors of Successful Learning]. TOV «Vseosvita». <https://vseosvita.ua/library/formuvanna-samoosvitnoi-kompetentnosti-uchniv-odin-z-najvazlvisih-faktoriv-uspishnogo-navcanna-33320.html> [in Ukrainian].
- Burluka, O.V. (2005). *Samoosvita osobystosti yak sotsiokulturne yavyshe* [Self-Education of the Individual as a Socio-Cultural Phenomenon] [Thesis in Pedagogy, Kharkivska derzh. akademiia kultury]. Kharkivska derzh. akademiia kultury [in Ukrainian].
- Derzhavnyi standart bazovoi serednoi osvity [State Standard of Basic Secondary Education] (2021). <https://www.kmu.gov.ua/npas/pro-deyaki-pitannya-derzhavnih-standartiv-povnoyi-zagalnoyi-serednoyi-osviti-i300920-898>
- Development of Education in Austria 2013/2014. (2015). www.bmbwk.gv.at
- Dovmatovych, N.H. (2014). Samoosvitnia kompetentnist maibutnikh fakhivtsiv u pedahohichnii teorii [Future Specialist's Self-Educational Competence in Pedagogical Theory]. *Pedahohichni protses: teoriia i praktyka*, 3, 18-22. http://www.irbis-nbu.gov.ua/cgi-bin/irbis_nbu/cgiirbis_64.exe?C21COM=2&I21DBN=UJRN&P21DBN=UJRN&IMAGE_FILE_DOWNLOAD=1&Image_file_name=PDF/pptp_2014_3_5.pdf
- Dubaseniuk, O.A. (2010). Kompetentnisnyi pidkhid u profesiinii pidhotovtsi vchytelia. In O.S. Bereziuk, L.O. Hlazunova (Eds.), *Formuvannia estetychnoi kompetentnosti osobystosti zasobamy narodoznavstva: zb. nauk. prats molodykh doslidnykiv* (pp. 10-16). Vyd-vo ZhDU im. I. Franka [in Ukrainian].
- Dubinka, M.M. (2019). Samoosvita osobystosti maibutnoho fakhivtsia yak vyshcha forma yoho samovyrazhennia [Self-education of the Personality of the Future Specialist as the Highest Form of his Expression]. *Pedahohika formuvannia tvorchoi osobystosti u vyshchii i zahalnoosvitnii shkolakh*, 62(2), 65-70. http://pedagogy-journal.kpu.zp.ua/archive/2019/62/part_2/15.pdf [in Ukrainian].
- Haida, V.Ya. (2019). Struktura samoosvitnoi kompetentnosti uchniv zakladiv zahalno i serednoi osvity [The Structure of Self-Educational Competence of Students of General and Secondary Education Institutions]. *Innovatsiina Pedahohika*, 17(2), 83-86. <https://doi.org/10.32843/2663-6085-2019-17-2-18> [in Ukrainian].
- Hrybanova, O.Ye. (2019). Formuvannia sotsialnoi kompetentnosti maibutnikh ekonomistiv u protsesi profesiinoyi pidhotovky v koledzhi [The Development of Social Competence of Future Economists in the Process of Their Professional

Training in College] [Ph.D. Thesis in Pedagogy, Zaporizhzhia National University]. Zaporizhzhia National University [in Ukrainian].

Hrynevych, L.M. (2016) *Nova ukrainska shkola: kontseptualni zasady reformuvannia serednoi shkoly* [New Ukrainian School: Conceptual Foundations of Secondary School Reform]. Ministerstvo osvity i nauky ukrainy [in Ukrainian].

Khatuntseva, S.M. (2014). Samoosvita v strukturі samovdoskonalennia vchytelia [Self-Education in the Structure of Teacher's Self-Improvement]. *Aktualni problemy derzhavnoho upravlinnia, pedahohiky ta psykholohii*, 1(10), 174-178. http://www.irbis-nbu.gov.ua/cgi-bin/irbis_nbu/cgiirbis_64.exe?C21COM=2&I21DBN=UJRN&P21DBN=UJRN&IMAGE_FILE_DOWNLOAD=1&Image_file_name=PDF/VKhnpu_filos_2018_51_12.pdf [in Ukrainian].

Kovalenko, N.V. (2009). *Formuvannia samoosvitnoi kompetentnosti uchniv osnovnoi shkoly silskoi mistsevosti* [Formation of Self-Educational Competence of Primary School Students in Rural Areas] [Ph.D. Thesis in Pedagogy, Sumskyi derzhavnyi pedahohichniy universytet imeni A.S. Makarenka]. Sumskyi derzhavnyi pedahohichniy universytet imeni A.S. Makarenka [in Ukrainian].

Kovalova O.A. (2018). *Psykholohichni osoblyvosti rozvytku sotsialno-komunikatyvnoi kompetentnosti vchyteliv* [Psychological peculiarities of social and communicative competence development of teachers] [Ph.D. Thesis in Psychology, Institute of a Gifted Child of the National Academy of Pedagogical Sciences of Ukraine, Kyiv, HSEE "Pereiaslav Khmelnytskyi State Pedagogical University named after Hryhorii Skovoroda"]. Institute of a Gifted Child of the National Academy of Pedagogical Sciences of Ukraine, Kyiv, HSEE "Pereiaslav Khmelnytskyi State Pedagogical University named after Hryhorii Skovoroda". http://iris-psy.org.ua/cite/Diss_Kovaliova.pdf [in Ukrainian].

Krykun, V. D. (2018). *Formuvannia inshomovnoi profesiinoi kompetentnosti maibutnikh mahistriv viiskovoho upravlinnia* [Formation of foreign language professional competence of future masters of military management] [Ph.D. Thesis in Pedagogy, Nats. universytet oborony Ukrainy im. Ivana Cherniakhovskoho]. Nats. universytet oborony Ukrainy im. Ivana Cherniakhovskoho [in Ukrainian].

Kudryk, L.H. (2020). *Orhanizatsiia samovykhovannia osobystosti: navchalno-metodychnyi posibnyk dlia pedahohiv (materialy avtorskoï tvorchoï maisterni)* [Organization of Self-Education of the Individual: Educational and Methodological Manual for Teachers]. Lviv: KZ LOR «LOIPPO» [in Ukrainian].

Liskovych, O.V. (2014). *Formuvannia predmetnoi i kluchovykh kompetentnostei uchniv osnovnoi shkoly u protsesi vyvchennia elektromahnitnykh yavlyshch* [Formation of Subject and Key Competencies of Secondary School Students in the Process of Studying of Electromagnetic Phenomena] [Ph.D. Thesis in Pedagogy, Kirovohradskyi derzhavnyi pedahohichniy universytet imeni Volodymyra Vynnychenka]. Kirovohradskyi derzhavnyi pedahohichniy universytet imeni Volodymyra Vynnychenka [in Ukrainian].

Lokshyna, O.I. (2014) «Kompetentnisna» ideia v osviti zarubizhzhia: uspikhy ta problemy realizatsii ["Competence" Idea in Education Abroad: Successes and Problems of

- Implementation]. *Kompetentnisnyi pidkhd v osviti: teoretychni zasady i praktyka realizatsii, n.d.*, 51–58. <https://lib.iitta.gov.ua/id/eprint/7124> [in Ukrainian].
- Mack A. (2001). Kompetenzentwicklung. *Innovatives Lehren und Lernen*, 61 –63 [in German] [in Ukrainian].
- Maistriuk, I.S. (2022). Samoosvita yak filosofska katehoriia [Self-Education as a Philosophical Category]. In *Moralno-etychni imperatyvy skovorodynivskoi tradytsii: Materialy VII mizhnarodnoi naukovo-praktychnoi konferentsii (3–4 hrudnia 2021 roku)* (pp. 85-87). Kharkivskyi natsionalnyi pedahohichnyi universytet imeni H.S. Skovorody [in Ukrainian].
- Maistriuk, I.S., & Ponomarova, N. O. (2021). Internet-resursy dlia orhanizatsikh samoosvity shkolariv [Internet Resources for Organized Self-Education of School Students.]. In *Naumovski chytannia: materialy XIX naukovo-praktychnoi konferentsii studentiv i molodykh vchenykh (23-24 lystopada 2021 r.)* (pp. 76-77). n.d. [in Ukrainian].
- Mosia, I.A. (2013). *Formuvannia samoosvitnoi kompetentnosti maibutnikh kvalifikovanykh robitnykiv* [Formation of Self-Education Competence of Future Skilled Workers] [Ph.D. Thesis in Pedagogy] [in Ukrainian].
- Nebytova, I. (2022). Scientific and Pedagogical Support for Future Primary School Teachers during Teaching Practice. *Educational Challenges*, 27(1), 80-91. <https://doi.org/10.34142/2709-7986.2022.27.1.07>
- Osodlo, V. I. (2010). Metodychni aspekty diahnostryky, formuvannia y rozvytku psykholohichnoi hotovnosti do profesiinoi diialnosti [Methodical Aspects of Diagnosis, Formation and Development of Psychological Readiness for Professional Activity]. *Visnyk Kyivskoho natsionalnoho universytetu imeni Tarasa Shevchenka. Viiskovo-spetsialni nauky*, 24–25 12, 1–123 [in Ukrainian].
- Ovcharuk, O.V. (Ed.). (2004). *Kompetentnisnyi pidkhd u suchasni osviti: Svitovy dosvid ta ukraïnski perspektyvy*. Kyiv: K.I.S. [in Ukrainian].
- Roi, S.D. (2015). Samoosvitnia kompetentnist maibutnikh vchyteliv predmetiv humanitarnoho tsyklu, yii stunist ta struktura [Self-Educational Competence of Future Teachers of Humanities, its Nature and Structure], *Nauka i osvita*, 8, 125-129. https://scienceandeducation.pdpu.edu.ua/doc/2015/JRN_8/26.pdf [in Ukrainian].
- Savchenko. O.Ya. (2011). Kliuchovi kompetentnosti – innovatsiinyi rezultat shkilnoi osvity [Key competence – innovative result of school education]. *Ridna shkola*, 8-9, 4-8 [in Ukrainian].
- Serhieienkova, O.P. (2017). Zhyttievyi uspikh yak kohnityvna katehoriia studentiv [Life Success as Students' Cognitive Category]. *Naukovi visnyk MNU imeni V.O. Sukhomlynskoho. Psykholohichni nauky*, 1(17), 163-168. <http://mdu.edu.ua/wp-content/uploads/psihol-visnik-17-2017-30.pdf> [in Ukrainian].
- Stepanets, N.P. (2013). Kompetentnisna paradyhma v pidhotovtsi kadriv dlia sfery turyzmu [Competency Paradigm in the Training of Personnel for the Field of

Tourism.]. *Problemy suchasnoi pedahohichnoi osvity. Seriia: Pedahohika i psykholohiia*, 39(3), 262-271 [in Ukrainian].

The Importance of Teaching. The Schools White Paper (2010). <http://www.educationengland.org.uk/documents/pdfs/2010-white-paper-teaching.pdf> [in Ukrainian].

Torichnyi, O. (2016). Formuvannia profesiinoi kompetentnosti maibutnikh ofitseriv-prykordonnykiv zasobamy proektnoi diialnosti [Formation of Professional Competence of Future Officers Borderguards by Means of Project Activities Technique]. *Visnyk Natsionalnoi akademii Derzhavnoi prykordonnoi sluzhby Ukrainy. Seriia: Pedahohika*, 1, n.d. http://nbuv.gov.ua/UJRN/Vnadped_2016_1_10 [in Ukrainian].

Yahupov, V.V., & Svystun V.I. (2007). Kompetentnisnyi pidkhid do pidhotovky fakhivtsiv u systemi vyshchoi osvity [Competence Approach to the Training of Specialists in the System of Higher Education]. *Naukovizapysky Kyievo-Mohylianskoii Akademii*, 71, 3–8. <http://ekmair.ukma.edu.ua/handle/123456789/6871> [in Ukrainian].

Yavorovska, T. (2018). Sotsialno-istorychni peredumovy rozvytku samoosvitnoi diialnosti osobystosti: teoretychnyi aspekt [Socio-Historical Background of the Development of Self-Education: Theoretical Aspect]. *Vytoky pedahohichnoi maisternosti*, 15, 359-364. <http://dspace.pnpu.edu.ua/bitstream/123456789/5372/1/Javorska.pdf> [in Ukrainian].

Zelnytskyi, A. M. (2012). Vyshcha viiskova osvita – problema harantuvannia yakosti [Higher Military Education is a Problem of Quality Assurance]. *Visnyk Natsionalnoho aviatsiinoho universytetu*, 1(26), 23–25 [in Ukrainian].

Ziaziun, I. A. (2001). Kulturna paradyhma v praktytsi humanitaryzatsii i humanizatsii suchasnoi osvity [Cultural Paradigm in the Practice of Humanization and Humanization of Modern Education]. In *Kulturna polityka v Ukraini u konteksti 192 svitovykh transformatsiinykh protsesiv: materialy mizhnar. nauk.-prakt. konf. (m. Kyiv, 12–13 hrudnia 2000 r.)* (pp. 40–43). Kyiv [in Ukrainian].

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

ЗМІСТ ПОНЯТТЯ ТА СТРУКТУРА САМООСВІТНЬОЇ КОМПЕТЕНТНОСТІ ШКОЛЯРІВ У СУЧАСНОМУ ОСВІТНЬОМУ ПРОСТОРИ

Мета статті – схарактеризувати самоосвітню компетентність особистості як ключову в сучасному освітньому просторі та розкрити сутність і виділити структурні компоненти самоосвітньої компетентності школярів.

Методологія. У дослідженні використано термінологічний аналіз для розвитку понять «компетентнісний підхід», «компетентність», самоосвітня компетентність»; загальнонаукові методи аналізу та систематизації науково-методичної літератури (щодо вивчення поняття компетентнісного підходу та підходів до визначення самоосвітньої компетентності особистості), порівняння (дослідження складових самоосвітньої компетентності); порівняльний метод був покладений в

основу порівняльного тлумачення сутності самоосвітньої компетентності школярів.

Результати. У ході дослідження проаналізовано такі ключові поняття, як «компетентнісний підхід», «компетентність», «самоосвітня компетентність». Висвітлено та узагальнено підходи до трактування самоосвітньої компетентності школярів (діяльнісний, особистісний та інтегративний). Систематизовано та порівняно погляди на розуміння структури самоосвітньої компетентності школярів. Запропоновано уточнене визначення самоосвітньої компетентності школярів на основі інтегративного підходу. Проведений аналіз психолого-педагогічних досліджень дає підстави для виділення компонентів самоосвітньої компетентності школярів.

Висновки. Під самоосвітньою компетентністю учня закладу загальної середньої освіти розуміємо інтегровану якість особистості, яка певним чином визначається систематизованими знаннями, самоосвітніми вміннями та навичками, це спрямованість на навчання впродовж життя, на мотиви та прагнення до самоосвітньої діяльності, сформовані навички самоконтролю та рефлексії, самооцінювання навчальної діяльності. Компонентами структури самоосвітньої компетентності є мотиваційно-ціннісний, змістовно-процесуальний та контрольньо-рефлексивний.

КЛЮЧОВІ СЛОВА: компетентність, компетентнісний підхід, самоосвіта, самоосвітня діяльність, самоосвітня компетентність, саморозвиток.

CITE THIS ARTICLE AS (APA style):

Maistriuk, I., & Ponomarova, N. (2022). Concept Content and Structure of Self-Educational Competence of School Students in the Modern Educational Space. *Educational Challenges*, 27(2), 122-137. <https://doi.org/10.34142/2709-7986.2022.27.2.09>



<https://doi.org/10.34142/2709-7986.2022.27.2.10>

THE TECHNOLOGICAL BASIS OF TRAINING FUTURE TEACHERS OF AGRICULTURAL DISCIPLINES IN HIGHER EDUCATION INSTITUTIONS: PEDAGOGICAL EXPERIENCE OF GREAT BRITAIN

Received: 25/07/2022

Accepted: 26/08/2022

Viktor NAGAYEV¹, & Tetiana GERLIAND²



¹ Doctor of Sciences (Pedagogy), Ph.D. in Pedagogy, Full Professor, Management, Business and Administration Department, State Biotechnological University, Alchevskykh Street 44, Kharkiv, Ukraine.

✉ E-Mail: nagaewiktor1966@gmail.com

id <https://orcid.org/0000-0002-3130-6112>



² Doctor of Sciences (Pedagogy), Ph.D. in Pedagogy, Senior Research Fellow, Head of Laboratory of Vocational Training Technologies, Institute of Vocational Education of National Academy of Educational Science of Ukraine, Vito-Litovsky Lane, 98-a, Kyiv, Ukraine.

✉ E-Mail: alfina_g@ukr.net

id <https://orcid.org/0000-0002-7991-0431>

ABSTRACT

The article **aims** to develop a comprehensive pedagogical model for training future teachers of agrarian disciplines in the context of implementing a three-level pedagogical technology for educational process management (EPM). The pedagogical experience of Great Britain is under review, which can be used to improve the technological process of forming the professional competence of teaching specialists.

The research **methodology** was determined by a set of methodological approaches (system, activity, competence, technological, personal

© Viktor NAGAYEV, & Tetiana GERLIAND, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

development) and was based on a pedagogical experiment that included ascertaining, formative and control stages.

Results. *The theoretical and methodological foundations of the introduction into the educational environment of the three-level pedagogical technology of educational process management in the conditions of training future teachers of agricultural disciplines in higher education institutions are analysed. An applied model of educational process management for the training of future teachers of agricultural disciplines is proposed on the example of the first (bachelor) level of education in the conditions of introducing a SMART-educational communicative environment.*

The structure of the readiness of future teachers of agricultural disciplines for professional activity (motivational-cognitive, practical-active, creative-developmental levels) is determined.

The technological stages of the process of professional training of future teachers of agricultural disciplines in institutions of higher education in the context of the pedagogical experience of Great Britain (motivational-orientational, planning, cognitive-transformative, control-analytical, regulatory-developmental) are considered. The didactic methods, forms and means of the proposed pedagogical technology for managing the educational process are substantiated.

Conclusions. *The results of the experimental work demonstrate a significant increase in the quality indicators of the professional training of future teachers of agricultural disciplines in higher education institutions (motivation, creative activity, productivity) in the conditions of the implementation of the three-level pedagogical technology of the EPM.*

The implementation of a three-level pedagogical technology in the educational process management system allows for boosting students' creative activity, increasing the level of their internal motivation, and deepening the level of independence and individualisation of learning, which eventually is determined by a high level of readiness for professional pedagogical activity.

KEYWORDS: *Educational and Creative Activity; Educational Process Management; Professional Training; Teachers of Agricultural Disciplines; Three-Level Pedagogical Technology.*

INTRODUCTION

Professional training of highly qualified teachers of agrarian disciplines in higher education institutions, capable of solving complex pedagogical problems imaginatively, is considered one of the decisive levers for overcoming the socio-economic crisis and bringing Ukraine's education to the level of highly developed

countries. First of all, it is envisaged to meet complex challenges related to the reform of the agricultural education system of Ukraine following international standards and the formation of highly qualified, creatively gifted educational personnel on this basis (Gerliand, & Nahaiev, 2021; Dotsenko, 2021; Klochko, 2018).

An essential aspect of this problem is the

introduction of pedagogical technologies into the educational environment as an objective prerequisite for the formation of the professional and creative competence of the future teacher of agricultural disciplines as a harmoniously developed personality proficient in innovative searches and creative self-development (Lushchyk, 2017; Nahaiev, 2018; Khryk, 2021).

The peculiarity of teaching agrarian disciplines is the need for teachers to develop an appropriate system of knowledge and skills regarding the technology of agricultural work and operations since the agricultural industry is a closed technological circle.

At the same time, the educational process should natively combine the content of technologies of the agricultural industry (product processing technology, food technologies, organic farming technologies, etc.) with appropriate pedagogical technologies.

In this regard, the requirements for the technological support of the educational process management of achieving the educational result are increasing. Modern teachers of agricultural disciplines must possess a complex of innovative knowledge, abilities and skills that correspond to the intensification of pedagogical processes and advanced achievements of science and education.

The requirements mentioned above stipulate the formation of experience of creative activity at the level of technological support of the educational result in future teachers of agrarian disciplines. However, the current training process for teachers of agrarian disciplines in Ukraine does not provide a high level of their professional competence and, as a result, an adequate level of readiness for creative pedagogical activity.

The facts above evidence the

contradictions identified by the authors, which prove the inconsistency of traditional didactic methods, forms and means of training pedagogical staff with modern technological requirements in the field of education. Under these conditions, the pedagogical system of a higher educational agrarian institution should respond appropriately to the social order and promote the activation of technological support for the training of pedagogical personnel, taking into account the experience of the countries of Western Europe, primarily Great Britain.

The training of highly qualified teachers of agrarian disciplines in higher education institutions in the context of the introduction of modern educational technologies is one of the priority directions of educational policy, which is confirmed by the state normative legal acts of the development of educational policy (Lushchyk, 2017; Lushchyk, 2017; Lushchyk, 2020; Luzan, 2015).

As noted in the latest provisions of the national strategy for the development of education in Ukraine, the education of the future should be based on a combination of information and digital technologies and individual technologies of personality development within the framework of a common electronic platform (Kabinet Ministriv Ukrainy, 2012).

The corresponding direction of professional training is closely connected with the problem of technologisation of educational process management, which can be solved based on a system approach with the search for new pedagogical technologies and innovative didactic means (Khryk, 2021; Titova et al., 2021).

In accordance with the above provisions, the pedagogical experience of Great Britain, as one of the leading countries of Western Europe, which actively uses modern information, communication and

digital technologies in education, is of great interest. The country's leading position in this field is conditioned, in particular, by the high level of scientific and technical development in the educational sector and the constant search and implementation of the newest strategies for educational process management (Lushchik, 2017; Lushchik, 2017; Nahaiev, 2018).

The purpose of the article is to substantiate the technological foundations of the professional training of future teachers of agricultural disciplines in higher education institutions based on the introduction of pedagogical technology of educational process management in the context of the pedagogical experience of Great Britain.

METHODOLOGY

The research was based on a pedagogical experiment with a technological procedure for separating control and experimental groups and included ascertaining, formative and control stages. The experimental groups studied according to the pedagogical model of educational process management (EPM), and the control groups studied according to the traditional education system (TES). On analysing the conditions of the experiment, it should be noted that in each experimental group, students were trained both under the state order and the contract form of education. The program of educational disciplines for the experimental and control groups was the same regarding the volume of classroom and independent work.

The content of professional training of experimental groups differed in the technological provision of educational process management, which determined the higher level of independence, individualisation, and creative learning activity of future teachers of agrarian

disciplines. The study was conducted on the example of professionally oriented disciplines ("Agronomy", "Fundamentals of Breeding", "Technology of Processing Agricultural Products", "Plant Protection", "Fruit and Vegetable Growing", and others) at the bachelor's educational level of applicants of speciality 015.37 "Professional Education (Agricultural Production, Processing of Agricultural Products and Food Technologies)" at the State University of Biotechnology.

The quality of specialists' training was monitored by the method of multi-level assessment using various diagnostic methods, which comprised: testing, oral and written surveys, solving situational problems, business games, analysing student youth's feedback on proposed pedagogical innovations, etc. The control system included current, intermediate and final control measures.

RESULTS

Taking into account the necessity of forming in future teachers of agrarian disciplines in institutions of higher education of abilities to creative activity within the chosen profession, the pedagogical system of higher education providers should find a place for innovative methods of organisation of students' educational-creative activity based on managerial concepts and comprehensive development of activity approach in the conditions of systematic application of pedagogical technologies. The subject of such activity should be an innovative pedagogical system with pedagogical technology for managing the educational process at the macro- and micro-level.

For example, the education system's modernisation in Great Britain is complex. The implementation of the technological aspect takes place in various directions, particularly in the educational process, education, scientific research, and

administration. Thus, the introduction of modern computer technologies in higher educational institutions of this country provides excellent opportunities for enhancing the quality of educational services and, on this basis, improving the professional training of future teachers of agricultural disciplines in higher education institutions (Titova et al., 2021).

An example of an innovative update of the didactic system of teaching staff training in professional education in Great Britain is a webinar. Note that this term is used to define both a virtual lecture and an online seminar. Participation in this type of work is considered one of the aspects of managing students' independent and individual work (Newman et al., 2017).

Also, an important direction in the development of professional education in Great Britain is the use of the tutor system with the application of the online learning environment Moodle (Modular Object-Oriented Dynamic Learning Environment), providing access to course materials and offering discussion forums, chats and web conferences (Hernandez-de-Menendez & Morales-Menendez, 2019).

Another innovation in the field of didactic principles of professional training of agricultural disciplines teachers is information and communication technologies aimed at forming the creative personality of future educators. For example, the so-called "flipped learning" has recently become extremely popular in Great Britain.

Compared with the application of the virtual educational environment such as Moodle, mainly used for course administration, storage of their contents and additional resources, "flipped learning" influences the pedagogical methodology, offering a way of combining online and classroom training. At the same time, students watch short video lectures

at home, while in the classroom, time is allocated for exercises, discussion of projects and debating (Newman et al., 2017, p. 48).

It is also appropriate to introduce the practice of dual education, which institutions of higher education widely implement in Great Britain in the professional training of teachers in the agricultural sector. The development of dual education, when both educational institutions and specialised agricultural enterprises participate in the training of future highly qualified specialists, is a mechanism that contributes to the improvement of the quality of education and its compliance with European standards and a competitive dynamic labour market.

It should be noted that the development of a model of practical training for a future professional teacher should be preceded by: an analysis of the current level of professional training; determination of qualitative changes in modern agricultural production; consideration of prospects for the development of agricultural production; determination of modern needs for the professional competence of the future specialist based on modern production requirements.

Analysing the experience of the leading universities of Great Britain, it is possible to propose its use in the professional training system of future teachers of agricultural disciplines in higher education institutions in Ukraine.

For example, the goal of implementing pedagogical technology for the management of the educational process is to increase the creative activity of students at all stages of their professional training, to stimulate systematic, regular cognitive activity, to increase the level of individualisation and differentiation of learning, which will contribute to the

formation of the creative personality of future teachers of agricultural disciplines.

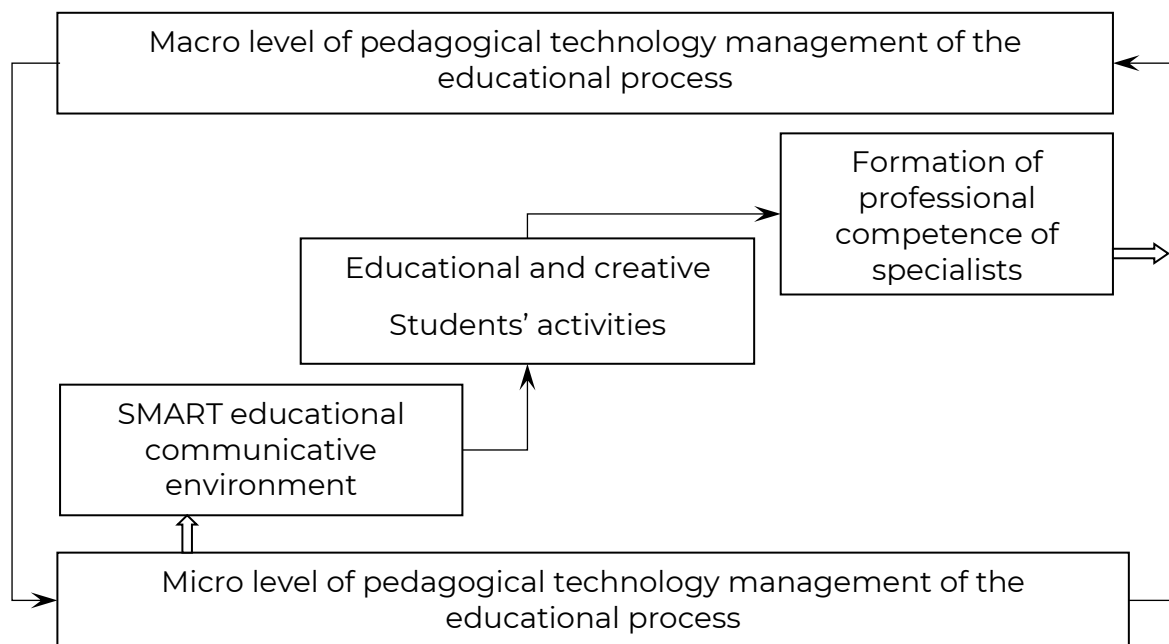
We have designed a three-level pedagogical technology for educational process management (EPM). At the macro level, management of the educational process is carried out by the university management, student self-government bodies, and public scientific organisations under the leadership of the educational department and the university's research department by involving students in creative educational and scientific activities.

At the micro level, management of the educational process is organised by a scientific and pedagogical worker while

teaching an educational discipline in the context of implementing pedagogical technology for managing students' educational and creative activities. At the information and communication level, the EPM technology unites the subjects of the pedagogical process with a SMART educational module of information that ensures the implementation of didactic principles in the conditions of the created information and communication educational environment (Klochko, 2018; Klochko et al., 2021; Luzan et al., 2021). The proposed model of the three-level pedagogical technology of educational process management (EPM) is shown in Figure 1.

Figure. 1.

Model of the three-level pedagogical technology for managing the educational process in training future teachers of agricultural disciplines in higher education institutions.



Our previous studies proved that students could consider the educational and creative activity as an object of management (self-management) under the conditions of purposeful influence of the individual on it, which leads to the formation of creative experience in the

system of educational results. The problem of management of students' educational and creative activity lies in developing the corresponding model, which would ensure the effective functioning of all components of the pedagogical system. Such a pedagogical

model should be represented by a kind of management microsystem, which includes a management body (the approximate part of the action), the executive body (the organisational part of the action), and the controlling body (the control part of the action).

Analysing psychological and pedagogical approaches, we conclude that the technology of managing the educational process should begin with the motivational and orientation stage, which forms the motives of students' educational activities based on the development of their needs for creativity.

While using a technological approach, it is possible to determine the following stages of organising the orientation activity: students' awareness of the necessity, possibility, and sequence (technology) of mastering the material of the discipline, as well as the construction of a scheme of the indicative basis of actions. The sequence of mastering consists in determining the purpose and tasks, revealing a set of questions when studying the topic, the necessary literature, the level of proficiency (reproductive, research, creative), and results (Nahaiev, 2018).

The planning stage of the EPM technology substantiates the system of students' learning goals. The implementation of the target program is carried out through the function of the organisation, which outlines the appropriate actions of the management subject in relation to the object in the pedagogical system.

According to the pedagogical experience gained in Great Britain, the effectiveness of planning activities is ensured by using various SMART-educational tools, in particular models: the curriculum of the speciality, the structural-logical scheme of the discipline and the structural-technological map of the thematic plan (Koshuk, 2017). At the same time, the main

task of organising the educational and creative activity (ECA) is to establish a creative educational environment, which will influence the students' creative activity in the future.

The next stage of the pedagogical technology of the EPM is the cognitive-transformative stage, which represents the processes of micromanagement at the level of the oriented basis of the student's actions. Such a well-adjusted micro-impact on educational and creative activity is determined by the achieved partial educational results and the content of the mental processes which run inside the personality of the future specialist. On this basis, processes of micro-reflection arise with the analysis of the achieved intermediate results, the study of directions for the further sequence of actions and obtaining an educational result.

The logical stage of the pedagogical technology of the EPM is the control and analytical stage, which should ensure the appropriate achievement level of educational goals at all stages of professional training of future teachers of agricultural disciplines in higher education institutions. This stage is provided by various types of control (current, intermediate, final) and diagnostic tools (testing, problem tasks, situational assignments, etc.), which determine the level of formation of pedagogical experience. At the same time, an essential psychological and pedagogical condition is the organisation of students' self-control, which is specified in achieving the appropriate managerial result.

The regulatory and development stage of the pedagogical technology of the EPM is carried out on the basis of the interpretation of the received control data, after which the subject of management exercises a corrective influence on the object of management – educational and

creative activity. Forms of the regulation process can be represented by organisational, pedagogical, psychological and other activities (improvement of the organisation of students' independent work, optimisation of the parameters of the pedagogical system, formation of new information channels between subjects of the pedagogical process, etc.).

At the same time, the student analyses the results achieved within the framework of reflective activity and determines the directions of further pedagogical interaction with the construction of an appropriate self-development strategy. Regulation of educational and creative activities is carried out individually on the basis of self-management skills (self-motivation, self-planning, self-organisation, self-control). Thus, according to the process approach, the pedagogical technology of EPM includes the following functional stages: motivational-orienting, planning, cognitive-transformative, control-analytical, and regulatory-developmental.

Following the proposed pedagogical technology of managing the educational process, the subject's pedagogical influence is determined by the function of

facilitation, providing students with stimulating mechanisms for self-learning. On this basis, the learners plan a personal strategy of self-management of educational and creative activities, which is organised according to the characteristics of a creative educational environment.

Self-management of learning includes such student functions as self-planning, self-organisation, self-motivation, self-control, and self-regulation, which leads to the activation of educational and creative activities and, as a result, to the achievement of the main goal – the formation of the creative pedagogical experience of a specialist (Nahaiev, 2012).

According to the results of the control stage of the experiment, the experts concluded that as a consequence of the implementation of the three-level pedagogical technology of the EPM, the majority of students acquired knowledge on the ground of which professional skills and abilities were formed, which are part of the whole complex of ensuring the readiness of future teachers of agricultural disciplines for professional activity. They are especially noticeable in the experimental groups (Table 1).

Table 1

Levels of formation of readiness of future teachers of agrarian disciplines for professional activity

| Component | Motivational and cognitive | | | | Practical and active | | | | Creatively-developmental | | | |
|---------------------------------------|----------------------------|------------|---------|-----|----------------------|------------|---------|------|--------------------------|------------|---------|------|
| | High | Sufficient | Average | Low | High | Sufficient | Average | Low | High | Sufficient | Average | Low |
| EG (experimental groups), % | 36.7 | 43.1 | 18.5 | 1.7 | 35.8 | 39.4 | 21.2 | 3.6 | 33.8 | 35.2 | 29.6 | 1.4 |
| CG (control groups), % | 18.8 | 34.1 | 44.6 | 2.5 | 17.5 | 31.4 | 32.9 | 18.2 | 15.9 | 29.1 | 42.3 | 12.7 |

The comparative analysis of the obtained results gives reason to state that the students of the experimental groups have a higher level of readiness for professional pedagogical activity, which is reflected in the motivational-cognitive, practical-active and creative-developmental spheres.

The comparative analysis of the obtained results gives grounds to state that the students of experimental groups have a higher level of readiness for professional pedagogical activity, which is reflected in the motivational-cognitive, practical-activity and creative-development spheres.

The data in the table prove that at the end of the experiment, the high level of the motivational-cognitive component of readiness reached the mark: for EG students – 36.7%; for CG students – 18.8%. Analysis of the state of the practical-activity component as a result of the pedagogical experiment illustrated that 35.8% of future EG specialists demonstrated a high level of readiness for professional activity. 33.8% of EG students and 15.9% of CG students showed a high level of the creative and developmental component of readiness. A sufficient level was revealed in 35.2% of EG students and 29.1% of CG students, respectively.

DISCUSSION

Professional competence according to the criteria of formation of the creative pedagogical experience of specialists is the final result of the functioning of the newly developed pedagogical technology of EPM. Meanwhile, management can be structured on the elements of ECA management by the teacher, teacher and student co-management and elements of student self-management. A crucial role in the educational process management is played by the SMART-educational communicative environment, in which

the organisational and methodological impact of the pedagogical system is realised during the training of future teachers of agricultural disciplines in higher education institutions.

This approach is based on introducing information and communication technologies into the educational process, which is determined by an electronic network of interactive didactic connections grounded on the principles of digital pedagogy. While considering the relations and connections between the components of the pedagogical system in the proposed pedagogical technology of the EPM, it is necessary to ascertain their non-linear nature, where specific relationships prevail in a synergistic unity, which leads to the emergence of new pedagogical structures and didactic criteria for the self-development of future specialists.

CONCLUSIONS

Summarising the experience of professional training of future teachers of agricultural disciplines in higher education institutions in Great Britain, it should be noted that there is a system of effective integration of information and communication technologies and active teaching methods aimed at forming the creative personality of the future teacher.

In the proposed three-level pedagogical technology of the EPM, the object of management is the educational and creative activity of students with elements of scientific research, which transforms the existing potential of the learner (abilities, motives, needs, level of training, etc.) into a quality result – the formation of the experience of the pedagogical activity of future teachers of agricultural disciplines in higher education institutions in the system of professional competence. According to the technological approach,

the management of students' educational and creative activities in the system of professional training of future teachers of agricultural disciplines in higher education institutions in Great Britain includes the following functional stages: motivational-orienting, planning, cognitive and transformative, control and analytical, regulatory-developmental.

This process results in organisational and technological algorithms, which aim to improve both the educational product and the structure of future specialists' educational and creative activities. An important aspect of the three-level pedagogical technology of educational process management is the harmonisation of organisational-technological and

psychological-functional (personal) factors based on the principles of subject-subject relations.

The obtained results make it possible to determine the ways for further scientific and pedagogical studies in this respect, among other things: design of network management of the educational process in the conditions of remote access to educational resources; development of interactive methodical electronic SMART-complexes for educational and methodical support of the educational process management; introduction of pedagogical micro-technologies of functional management of the educational process of applicants during their master's training.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Antonchenko, M. O. (2015). Pedagogichni umovy efektyvnoho vykorystannia informatsiinykh tekhnolohii v osviti [Pedagogical Conditions of the Effective Use of Information Technology in Education]. *Novi informatsiini tekhnolohii v osviti dlia vsikh: zb. materialiv mizhnar. konf., 26-27 lyst. 2015*, 1, 14-19 [in Ukrainian].
- Dotsenko, N. A. (2021). Tekhnolohiia profesiinoi pidhotovky bakalavriv z ahroinzhenerii v umovakh informatsiino-osvitnoho seredovyshcha [Pedagogical Content of the Professional Preparation Bachelors in Agricultural Engineering in the Conditions of the Informational and Educational Environment]. *Innovatsiina pedahohika*, 22(2), 190-195 [in Ukrainian].
- Gerliand, T. M., & Nahaiev, V. M. (2021). Osoblyvosti realizatsii kompleksnoi profesiinoi pidhotovky maibutnikh kvalifikovanykh robitnykiv na zasadakh modulno-kompetentnisnoho pidkhodu z vykorystanniam elementiv dualnoho navchannia [Features of the Implementation of Comprehensive Training of Future Skilled Workers on the Basis of Modular-Competence Approach Using Elements of Dual Learning]. *Innovatsiina pedahohika*, 38, 111-115. <https://doi.org/10.32843/2663-6085/2021/38.22> [in Ukrainian].
- Hernandez-de-Menendez, M., & Morales-Menendez, R. (2019). Technological Innovations and Practices in Engineering Education: a Review. *International Journal on*

Interactive Design and Manufacturing (IJIDeM), 13, 713-728.
<https://doi.org/10.1007/s12008-019-00550-1>

- Kabinet Ministriv Ukrainy. (2012). *Natsionalna stratehiia rozvytku osvity v Ukraini na 2012-2021 roky: ukhvalena Kabinetom Ministriv Ukrainy 11 veres* [National Strategy for Education Development in Ukraine for 2012-2021: Adopted by the Cabinet of Ministers of Ukraine, 11th September, 2012]. www.kmu.gov.ua/control/uk/publish/article [in Ukrainian].
- Khryk, V.M. (2021). Innovatsiini tekhnolohii pidhotovky maibutnikh fakhivtsiv lisovoho hospodarstva [Innovative Technologies for Training Future Forestry Professionals]. *Pedahohichni nauky: teoriia, istoriia, innovatsiini tekhnolohii*, 7(111), 356-371 [in Ukrainian].
- Klochko, O. V. (2018). *Profesiina pidhotovka maibutnikh menedzheriv ahrarnoho vyrobnytstva zasobamy suchasnykh informatsiino-komunikatsiinykh tekhnolohii* [Professional Training Future Managers of Agricultural Production by Means of Modern Information and Communication Technologies]. Vinnytsia: T.P. Baranovska [in Ukrainian].
- Klochko, O., Nagayev, V., Kovalenko, O., & Fedorets, V. (2020). Forming of Professionally Creative Competence of Prospective Agrarian Managers by Facilities of Digital Technologies. *Society. Integration. Education. Proceedings of the international scientific conference*, 4, 460-474. <https://doi.org/10.17770/sie2020vol4.4847>
- Koshuk, O. B. (2017). Perspective Directions of Modernisation to Vocational Training of Future Mechanical Engineers Agricultural Industry. *Scientific journal innovative solutions in modern science*, 8(17), 24-36. [https://doi.org/10.26886/2414-634X.8\(17\)2017.2](https://doi.org/10.26886/2414-634X.8(17)2017.2)
- Lushchyk, Y. (2017). Training Future Agrarians: Specifics of Academic Programmes of Bachelor's Degrees in Great Britain. *Středoevropský věstník pro vědu a výzkum*, 5(41), 42-52.
- Lushchyk, Y. (2020). Theoretical Issues of Training Future Agrarians in Higher Education. *Educational Challenges*, 25(1), 68–81. <https://doi.org/10.34142/2709-7986.2020.25.1.06>
- Lushchyk, Yu. M. (2017). Zastosuvannia suchasnykh tekhnolohii u protsesi pidhotovky maibutnikh ahrariiv u vyshchii osviti Velykoi Brytanii [Application of Modern Technologies in the Process of Training Future Agrarians in Higher Education of Great Britain]. *Pedahohika ta psykhohihiia: zb. nauk. prats KhNPU imeni H.S. Skovorody*, 57, 236-247 [in Ukrainian].
- Luzan, P. H. (2015). *Naukovi osnovy orhanizatsii pedahohichnoho protsesu v ahrarnomu vyshchomu navchalnomu zakladi* [Scientific Basis of the Organisation of Pedagogical Process in Agrarian Higher Educational Institution: monograph]. Milenium [in Ukrainian].
- Luzan, P., Koshuk, O., Titova, O., Mosia, I. (2022). The Technology of the Learning Outcomes Test Development. In V. Tonkonogyi, V. Ivanov, J. Trojanowska, G. Oborskyi, & I. Pavlenko, (Eds.), *Advanced Manufacturing Processes III. InterPartner 2021. Lecture Notes in Mechanical Engineering* (pp. 687–696). Springer, Cham. https://doi.org/10.1007/978-3-030-91327-4_66

- Nahaiev, V. M. (2018). *Metodolohichni zasady upravlinnia navchalno-tvorchoiu diialnistiu studentiv* [Methodological Principles of Management of Educational and Creative Activities of Students]. Kharkiv: «Styl'na typohrafiia» [in Ukrainian].
- Nahaiev, V. M. (2012). *Dydaktychni zasady vprovadzhennia dvorivnevoi pedahohichnoi tekhnolohii upravlinnia navchalno-tvorchoiu diialnistiu studentiv vshchychkh navchalnykh ahrarnykh zakladiv* [Didactic Principles of Introduction of Two-Level Pedagogical Technology of Management of Educational and Creative Activity of Students of Higher Educational Agrarian Establishments]. Kharkiv: Kolehium [in Ukrainian].
- Nahaiev, V.M. (2018). Tekhnolohichni zasady formuvannia tvorchoho dosvidu v systemi profesiinoi pidhotovky menedzheriv ahrarnoi sfery: pedahohichniy dosvid Velykobrytanii [Technological Principles of Formation of Creative Experience in the System of Professional Training of Agricultural Managers: Pedagogical Experience of Great Britain]. *Zbirnyk naukovykh prats natsionalnoi akademii derzhavnoi prykordonnoi sluzhby Ukrainy. Seriya: Pedahohichni nauky, 1* (12), 224-235 [in Ukrainian].
- Newman, M., Capital, A., & Capital, E. (2017). Ripples in the Agricultural Education Pool. *Journal of Agricultural Education*, 58(1), 4-13. <https://doi.org/10.5032/jae.2017.01001>
- Titova, O., Luzan, P., Sosnytska, N., Kulieshov, S., & Suprun, O. (2021). Information and Communication Technology Tools for Enhancing Engineering Students' Creativity. In V. Ivanov, J. Trojanowska, I. Pavlenko, J. Zajac, D. Peraković (Eds.), *Advances in Design, Simulation and Manufacturing IV. DSMIE 2021. Lecture Notes in Mechanical Engineering* (pp. 332-340). Springer, Cham. https://doi.org/10.1007/978-3-030-77719-7_33

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:**ТЕХНОЛОГІЧНІ ЗАСАДИ ПІДГОТОВКИ МАЙБУТНІХ ВИКЛАДАЧІВ
АГРАРНИХ ДИСЦИПЛІН У ЗАКЛАДАХ ВИЩОЇ ОСВІТИ:
ПЕДАГОГІЧНИЙ ДОСВІД ВЕЛИКОЇ БРИТАНІЇ**

Мета статті полягає в розробці комплексної педагогічної моделі підготовки майбутніх педагогів аграрних дисциплін в умовах впровадження трирівневої педагогічної технології управління навчальним процесом. Аналізуються педагогічний досвід Великої Британії, який може бути використано для вдосконалення технологічного процесу формування професійної компетентності фахівців-педагогів.

Методологія дослідження визначалася сукупністю методологічних підходів (системний, діяльний, компетентнісний, технологічний, особистісно-розвивальний) і базувалася на педагогічному експерименті, що включав констатувальний, формувальний та контрольний етапи.

Результати. Проаналізовано теоретичні та методичні основи впровадження в освітнє середовище трирівневої педагогічної технології управління навчальним процесом в умовах підготовки майбутніх викладачів аграрних дисциплін у закладах вищої освіти. Запропоновано

прикладну модель управління навчальним процесом для підготовки майбутніх викладачів аграрних дисциплін на прикладі першого (бакалаврського) рівня освіти в умовах запровадження SMART-освітнього комунікативного середовища.

Визначено структуру сформованості готовності майбутніх викладачів аграрних дисциплін до професійної діяльності (мотиваційно-пізнавальний, практично-діяльнісний, творчо-розвивальний рівні).

Розглянуто технологічні етапи процесу професійної підготовки майбутніх викладачів аграрних дисциплін у закладах вищої освіти в контексті педагогічного досвіду Великобританії (мотиваційно-орієнтувальний, планувальний, пізнавально-перетворювальний, контроль-аналітичний, регульовально-розвивальний). Обґрунтовуються дидактичні методи, форми та засоби запропонованої педагогічної технології управління навчальним процесом.

Висновки. Результати експериментальної роботи засвідчили суттєве підвищення якісних показників професійної підготовки майбутніх викладачів аграрних дисциплін у закладах вищої освіти (умотивованість, творча активність, продуктивність) в умовах впровадження трирівневої педагогічної технології УНП.

Реалізація трирівневої педагогічної технології в системі управління навчальним процесом дозволяє активізувати творчу діяльність здобувачів, підвищити рівень їх внутрішньої мотивації, поглибити рівень самостійності та індивідуалізації навчання, що у підсумку визначається високим рівнем готовності до професійної педагогічної діяльності.

КЛЮЧОВІ СЛОВА: навчально-творча діяльність; управління навчальним процесом; професійна підготовка; викладачі аграрних дисциплін; трирівнева педагогічна технологія.

CITE THIS ARTICLE AS (APA style):

Nagayev, V. & Gerliand, T. (2022). The Technological Basis of Training Future Teachers of Agricultural Disciplines in Higher Education Institutions: Pedagogical Experience of Great Britain. *Educational Challenges*, 27(2), 138-150. <https://doi.org/10.34142/2709-7986.2022.27.2.10>



<https://doi.org/10.34142/2709-7986.2022.27.2.11>

DISTANCE LEARNING IN HIGHER EDUCATION: THE EXPERIENCE OF THE COVID-19 PANDEMIC AND WAR IN UKRAINE

Received: 24/08/2022

Accepted: 26/09/2022

Yaroslav OPANASENKO¹, & Viktoriia NOVIKOVA²



¹ Ph.D. Student, the Department of Educology and Innovative Pedagogy, H.S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.

✉ E-Mail: opanasenko.hnpu@gmail.com

 <https://orcid.org/0000-0001-5619-6565>



² Ph.D. in Pedagogy, Senior Lecturer, Department of Chemistry, Biochemistry, Microbiology and Food Hygiene, State Biotechnological University, Kharkiv, Ukraine.

✉ E-Mail: vika16071974novikova@gmail.com

 <https://orcid.org/0000-0003-0403-3590>

ABSTRACT

Distance learning has become one of the most popular educational trends of the 21st century, and the COVID-19 pandemic and war in Ukraine has only accelerated the process of its integration into the education sector.

*The **purpose** of our work is to study the influence of the online learning format on the adaptation and academic success of students, as well as to search for promising analogues.*

*The **methodology**. In addition to a comprehensive theoretical analysis, which included a comparison of different approaches and research, we used the method of interviewing respondents, which involved 200 first-year students from 6 Ukrainian higher education institutions (H.S. Skovoroda Kharkiv National Pedagogical University, Taras Shevchenko National University of Kyiv, V. N. Karazin Kharkiv National University, National Technical University*

© Yaroslav OPANASENKO, & Viktoriia NOVIKOVA, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

of Ukraine Kyiv Polytechnic Institute, State Biotechnology University, Kharkiv National University of Radio Electronics). The survey was conducted online using the Google Forms platform in the period from December 19 to 26, 2021, the calculation and visualization of the received data were performed using Microsoft Office tools. Fisher's statistical test (online-tool) was used to establish differences between the indicators of academic success of the respondents of the two groups.

Results. We decided to compare the academic success of students who study online with students included in the blended learning system. Thus, only 8% of the respondents who took the course in an online format received a mark of 5 at the end of the academic semester, while almost a quarter (25%) of the students of the second group who took the course in blended learning received the highest score. We also asked respondents to evaluate the process of their own adaptation to new conditions (distance and blended learning). The results of the survey showed that the adaptation process proceeds much easier in the conditions of the blended learning or Flipped Classroom blended learning model, while the adaptation of respondents to the online format had a number of problems.

Conclusion. Online learning has a high potential, which is difficult to realize due to the high demands on technical support, communication problems in an unfamiliar space, and the lack of social presence of participants in the educational process. Blended learning, as a combination of full-time and distance learning, can offset the shortcomings of online learning and realize its potential. The next step in our research will be to compare the performance of another learning models.

KEYWORDS: Academic Success, Distance Learning, Ukraine's Higher Education System, the COVID-19 Pandemic, Experience, Student, War.

INTRODUCTION

The modern era is characterized by a sharp transition of society from the post-industrial stage to the information age. Such a transition affects a huge number of factors and processes of habitual human life. Education, as one of the most important and at the same time the most innovative institutions of society, is forced to adapt, focusing on technological progress.

Pedagogical technologies come to the fore, which form students' internal motivation for education, the ability to analyze and systematize information, make decisions quickly, and effectively

organize the process of their own education. Traditional forms of education can no longer satisfy the high demands of the labor market and society development, while innovative technologies open up access for students to non-traditional sources of information, increasing the efficiency of independent work and providing previously unseen opportunities for creativity and self-expression.

COVID-19 pandemic has fundamentally changed the traditional learning process. Dealing with a whole range of new educational problems, teachers faced the question of finding a universal solution. Distance learning, which is now strongly

associated with online education, has shown itself to be an obvious alternative that can be effective under the constraints of pandemic, war or others «force majeure». Thanks to technological advances in learning, the distance format includes the active use of computers in improving the quality of learning.

Online platforms are considerable for use in the process of teaching mathematical disciplines that require high accuracy, accurate, fast and reliable graphic display of educational elements. The computerization of the educational process has proven itself well within the framework of the study of mathematical concepts, especially those based on geometry, calculus, statistics and functional graphics even before the conditions of distance learning occurred.

Although online education has been around for more than a decade, until recently it has come under considerable criticism from both academics and education managers.

However, the conditions of the pandemic have helped stakeholders reach a consensus and allow distance learning to show its full potential in the context of the new educational paradigm. Today, there are signs that distance learning will soon become a traditional form of the educational process and will firmly enter the education system after the end of the pandemic and the beginning of war.

The COVID 19 experience has forced educators to experiment with online education and has generated sympathy and acceptance along with its limitations (Nambiar, 2020). World organizations such as UNESCO provide support to various countries through the provision of solutions for inclusive distance learning. UNESCO is working with local organizations to ensure continuity of

learning for all groups of students, especially disadvantaged children and adolescents, who tend to be the hardest hit by school and university closures. Many commercial organizations have already experimented with working from home and have expressed a desire to continue working in this mode over the next 5 years.

The implementation of individual training programs, as well as the features of building a student-centered curriculum, were considered in the Iyer study (Iyer et al., 2020). Pedagogical and psychological tools for increasing students' motivation for distance learning were studied by Bazelais (Bazelais, 2018). Promising ways to increase student involvement in the distance learning process, as well as encouragement methods in this format, were given by Castro (Castro, 2019).

Key features of the "individual trajectory" model, namely the option of learning in accordance with one's own style and pace have been considered by Rizaq (Rizaq et al., 2021). Increasing student performance and academic success through online education was researched by Serrano (Serrano et al., 2019). The development of critical thinking skills in students of the humanities in distance learning was the object of research by Lackovic (Lackovic, 2017).

The forms of implementation of individual learning in the blended learning format were considered by Mata (Mata, 2016). Group activity and students interaction in the distance learning format was studied by Dabbagh (Dabbagh, 2012). Features of feedback as a psychological phenomenon in online learning were investigated by Nambiar (Nambiar, 2020).

The purpose of our work is to study the influence of the online learning format on the adaptation and academic success of students, as well as to search for promising

analogues. To achieve this goal, we have compiled a list of tasks:

1. Reveal the negative features of online learning;
2. Explore possible analogues of online learning in a pandemic;
3. Highlight the main requirements for an effective educational model in a pandemic;
4. Conduct an experimental study of the influence of online learning on students' adaptation, as well as their academic success.

METHODOLOGY

In addition to a comprehensive theoretical analysis, which included a comparison of different approaches and research, we used the method of interviewing respondents, which involved 200 first-year students from 6 Ukrainian higher education institutions (H.S. Skovoroda Kharkiv National Pedagogical University, Taras Shevchenko National University of Kyiv, V. N. Karazin Kharkiv National University, National Technical University of Ukraine Kyiv Polytechnic Institute, State Biotechnology University and Kharkiv National University of Radio Electronics).

The survey was conducted online using the Google Forms platform in the period from December 19 to 26, 2021, the calculation and visualization of the received data were performed using Microsoft Office tools. Fisher's statistical test (online tool) was used to establish differences between the indicators of academic success of the respondents of the two groups:

1. the actual results of the educational activities of students;
2. the degree of satisfaction of respondents the process of adaptation to new conditions;
3. a list of problems and their prevalence among the respondents.

RESULTS

In order to study in more detail the problems and possible risks of distance education, in our opinion it would be appropriate to compare it with traditional, full-time education and highlight the pros and cons. After COVID -19 situation most institutes and universities around the world have been forced to urgently create online courses for various types of diplomas, certificates and degrees. The Internet has already managed to change the world of education, not only for students and teachers, but also for regulators and administrators. Current war in Ukraine restricted many possibilities for students and teachers and practically made classical education forms impossible in dangerous conditions.

The existing experience allows us to highlight the following strengths of online education:

- Students are more empowered to manage their schedules and study programs using online tools. This gives participants the opportunity to simultaneously study using online courses and live in the same mode, without endangering their lives, sacrificing their work and home life for the sake of studying. Distance education maintains psychological harmony in their lives, which is an important factor in successful learning. It also allows students the opportunity to improve their skills without leaving their workplace. Some Scholars (Ching et al., 2020) believe that online learning is currently the only way to include education in the busy schedule of the average person.
- The financial cost of commuting to a school is greatly reduced or eliminated, and the direct cost of education is further reduced by lower tuition fees, lower facility maintenance costs, and reduced staff

hours. This increases the accessibility of education and makes it available to a wide range of students.

– Low requirements for learning space, which can be replaced by a comfortable home environment (Nahaev & Hrynova, 2020). With the necessary technical equipment, students have the opportunity to study from any safe and comfortable place in the world, which in turn increases the volume of training flows and at the same time reduces the cost per student. The same applies to teachers who have the opportunity to create their own office in any place convenient for them. The initial cost of investment is high (especially for technical support), but this is a one-time investment, while the profit will pay off the investment in subsequent months.

At the same time, online education has a number of negative aspects that are worth mentioning:

– Online education is demanding on the student's self-discipline, since in the conditions of distance education it regulates a much larger number of factors, while in the classical situation of full-time education, the conditions are set by the administration of the higher educational institution. A high level of self-discipline is one of the distinguishing features of a mature person, therefore, there are risks of reduced effectiveness of online education in the first study years at universities due to the lack of necessary competencies for students to control and regulate their educational activities, (Huiwen Gao, 2021).

– Homeschooling can negatively affect students' motivation and sometimes interfere with the formation of the necessary work environment, although there are studies proving that it is possible for some people to simultaneously enjoy the comforts of home with their families

and at the same time excel in the learning process. However, home learning conditions can negatively affect the student's adaptation process and their academic performance, primarily due to a large number of distractions (relatives, household chores, extraneous noise, etc.). Building an effective educational space is one of the prerequisites for an effective educational process, especially when it comes to online education, which is characterized by social distance and lack of close contact with other participants in the process.

– Students have the opportunity to formally stay in an online educational conference, turning off the sound of their videos and microphones, which is a convenient option for the students (it allows them to solve personal or domestic issues that distract them from the educational process), but it has a destructive effect on other participants in the process. This leads to the fact that other students are less actively involved in the educational process, dropping out of the general discussion, and teachers are forced to interrupt, returning inactive participants (Seethal et al., 2019). The lack of effective pedagogical tools for such situations among teachers can significantly reduce the productivity of online education.

– The campus of the university/college was a meeting place for students, and at the same time an important psychological resource, a social field for communication and part of the educational environment. Campus attendance in some Ukrainian cities has become a rarity these days due to the war and may all disappear in the future as students choose to study online after the war ends. The college campus culture will be gradually eradicated due to the online education model.

– The high demands on both the technical equipment of both sides of the educational process, and the constant availability of an Internet connection, which is an indispensable element of online learning, can become an insurmountable obstacle in certain places. This makes this form of education vulnerable and dependent on external factors, which was not a limiting factor in the face to face form.

– Orientation to technical means and long-term concentration on the monitor screen as a prerequisite for the inclusion of a student in a distance learning environment leaves an imprint on his internal state. Existence and successful activity in a new space for him also puts forward a whole list of specific requirements, such as the ability to isolate and analyze the necessary information from the general flow; the ability to succinctly and competently formulate a question or request, the ability to correctly distribute the load and quickly process the information received, etc.

Thus, we can state with confidence that distance learning has a number of negative features and is not a perfect educational form. High demands, dependence on technical equipment, psychological artifacts that arise in the learning process – all this can adversely affect the student's adaptation to new conditions and, as a result, his academic performance. A number of scientists propose blended learning as a more effective alternative to online education.

Blended learning means the combined use of face-to-face learning in its classical sense and online learning using Internet technologies, which allows students to combine self-education, effective online technologies (virtual laboratories, remote internships, communication and exchange of experience with teachers and specialists

around the world) and full-time education within the walls of the university.

Thus, flexible blended learning is called hybrid learning by some scholars (Smith, & Hill, 2019). Blended learning is the optimal response to the needs of modern students for the flexibility to decide what topic they want to study, when, where and how, as well as in accordance with a student-centered learning model. Blended learning technologies will reach more students worldwide and achieve the sustainable development goals (Jdaitawi, M. 2020).

As such, blended learning, as a synergistic combination of face-to-face learning and online learning, is gaining momentum and seems to be preferred by students as it actively integrates student-centered curricula and is flexible according to student needs. Students can choose their preferred format of learning, depending on both external factors and individual features. Despite the fact that the distance component of blended learning is considered by many scientists as a key one, blended learning can significantly expand the understanding of face-to-face learning, change the learning environment with more freedom for students.

As such, blended learning, as a synergistic combination of face-to-face learning and online learning, is gaining momentum and seems to be preferred by students as it actively integrates student-centered curricula and is flexible according to student needs. Students can choose their preferred format of learning, depending on both external factors and individual features. Despite the fact that the distance component of blended learning is considered by many scientists as a key one, blended learning can significantly expand the understanding of face-to-face learning, change the learning environment with more freedom for students.

Table 1

Comparison Face-to-face, Online and Blended Learning Technologies

| Face-to-face Learning | Online Learning | Blended Learning |
|---|---|--|
| face to face mainly relies on holding classes within the walls of educational institutions and the use of lecture rooms, laboratories, etc. | Uses online resources to provide training courses, online and offline materials. | Combines online learning with full-time learning, as well as student self-education under the supervision of tutors and teachers |
| Guarantees an educational environment in the form of a campus of an educational institution | Formalized environment may be completely absent | Partial acquaintance of students with the campus of the educational institution |
| Widely accepted, classic teaching format based on long-standing pedagogical traditions | Based on innovative technologies, constantly changing format, which is now the subject of discussion | This is a compromise between the two models, which is gradually gaining acceptance around the world. |
| Expensive maintenance of resources, premises and infrastructure of an educational institution | Only initial investments in the technological support of the educational process are needed, a cheaper option | Investment is greater than in online education, but less than in face-to-face programs. |
| Teachers and staff are already well trained and have the necessary professional competencies | Employees face the need to improve ICT competencies to work effectively remotely | Employers are actively developing training according to this model, new teacher roles (tutor, mentor) are emerging, for which there are already developments |
| Unable to use this model due to social distancing in a COVID situation. | A popular option during the COVID situation | A popular option during the COVID situation when the necessary conditions are met; has the potential to be the future of education |
| Independent of technology related issues | Internet infrastructure and bandwidth issues can become critical | Internet infrastructure and bandwidth issues are an important but optional element of the learning process |

As such, blended learning, as a synergistic combination of face-to-face learning and online learning, is gaining momentum and seems to be preferred by students as it actively integrates student-centered curricula and is flexible according to student needs. Students can choose their preferred format of learning, depending on both external factors and individual

features. Despite the fact that the distance component of blended learning is considered by many scientists as a key one, blended learning can significantly expand the understanding of face-to-face learning, change the learning environment with more freedom for students.

Blending learning allows students to follow their own flexible plan and learning style, learn at their own pace, following their own educational trajectory and adapt their educations to difficult or dangerous life situations. Blended education also offers a high level of accessibility that allows students to access materials from anywhere at any time while enjoying the benefits of personal support and teacher referral (Bruggeman et al. 2021).

Blended learning supports more effective interaction between students and their teachers through the use of email, forums and chats combined with live, informal communication and a sense of socialization. Students and teachers can track student progress using technological tools (such as online monitoring platforms) and make adjustments to the learning process using classic pedagogical tools.

Modern education must be consistent with the expectations of students in order to effectively use relevant technologies. As part of the remote component of blended learning, the creation, formatting, saving, recording, sending, delivery and verification of educational materials are entirely dependent on technical support. Technology is the main condition for a smooth transition from classical learning to blended learning (Lazar et al., 2020).

The effectiveness of this stage depends entirely on the technical resources and competencies of the IT team. Technological support of blended learning involves one-time investments, as well as subsequent support of the educational infrastructure. The situation with the COVID pandemic has made blended learning a possible next step in the development of online learning, and established technologies have become the main means of its implementation.

Thus, this need for technology has made experience and technical know-how mandatory for all teachers and administrators, as well as for students (Apandi et al., 2020). The main factor influencing the use of technology is the predicted value of the technology to the organization.

The ease of use of relevant technologies for education in teaching and learning will affect the actual use of the blended learning system. The majority of students prefer to use technologies based on PC platforms, mobile devices or smart gadgets, so the complexity of their integration is significantly reduced (Kim et al., 2017).

The relative benefit of using technology to implement blended learning lowers barriers and increases educational potential, while perceived risks are minimal given the current war situation in Ukraine. Gamification can also be used to keep students interested and improve the skills needed in the industry (Ramirez et al., 2021).

Obvious transformations in the structure of the educational process determine the nature of the professional activity of the scientific and pedagogical staff. What is the role of the teacher in the innovative educational environment of the student? Is a classical teacher needed in a blended learning system if the main generally accepted principle of this model is focused on the initiative of the student and his activity?

Thus, a teacher within the system of mixed education is forced to restructure, mastering a new set of professional competencies of a facilitator - a person who organizes and conducts group forms of work in order to increase their effectiveness (Rabia et al., 2016).

In the new system of interaction, it is the student who occupies a central position in the educational process, while the teacher is assigned the function of a consultant, organizer of the educational and creative process, but no longer the main resource for obtaining information.

A number of scientists also highlight the human factor as crucial in the implementation of a blended learning system (Aditya et al., 2021). The administration of the educational institution should not only encourage awareness of the need for change, but also ensure smoothness and "painlessness" through social and psychological trainings, professional development programs, exchange of experience, etc.

Skills and knowledge should be transferred by the organization to its employees (Oliveira et al., 2021). Enforcing these changes and ensuring that educators stay within the new educational process and do not revert to old systems is the last step of the envisaged changes (Siegel et al., 2017; Vaportizis et al., 2017).

The successful implementation of blended learning systems depends on the satisfaction of a whole list of requirements, which can be roughly divided into three groups. The first group of factors includes the optimal organizational conditions for the successful implementation of blended learning systems:

- a sufficient number of classrooms equipped with the necessary technical equipment;
- stable Internet streaming for playing video materials/ video lectures and performing interactive exercises, functioning of online laboratories, organizing online conferences, keeping records of student progress;

- website of an educational institution, where students can get all the necessary information at any time;
- safety of the process of control and testing of students' knowledge;
- availability in the state of providing technical support for the distance component of blended learning for both students and teachers.

The second group of problems is related to the level of professionalism of the teacher and his pedagogical competencies, as a structured set of knowledge, skills, abilities, and attitudes acquired in the course of learning (Chernenko, 2021).

- willingness to review and adapt existing pedagogical strategies;
- sufficient informational and communicative competence;
- optimal distribution of own resources with the obligatory allocation of time for the development of new educational technologies;
- ability to create high-quality electronic content in various formats;
- willingness to act as a tutor or mentor for students.

The third group of factors contributing to the successful application of blended learning technology directly relates to the personality of the student. These requirements include:

- formed internal motivation to gain knowledge and willingness to take responsibility for the results of their studies;
- discipline and self-organization skills for timely completion of tasks and active self-education;
- conscientiousness in the performance of tasks and honesty in the process of checking and controlling knowledge, which in a remote format is subject to the risk of falsifying the results.

An analysis of the literature allows us to conclude that the successful implementation of blended learning technology is possible only when all three groups of problems are solved. Neglecting or ignoring any of the above conditions will hinder the achievement of planned results and significantly reduce the effectiveness of the blended learning system, which will further negatively affect the academic performance of students.

The results of a study conducted by scientists from the Clayton Institute for Disruptive Innovation Christensen, identified the key parameters of high-quality blended learning:

- a high level of personalization of curricula, encouraging students to build an individual learning path, the inclusiveness of the educational process, its accessibility and openness;
- learning based learning (Bloom's theory), according to which, students must demonstrate perfect mastery of what they have learned before moving on to new material.
- an environment of high achievement, where each student has a range of

professional reference points, as well as teachers who are ready to help form a step-by-step path to achieve their goals; the student is able to engage in learning activities, achieving this goal).

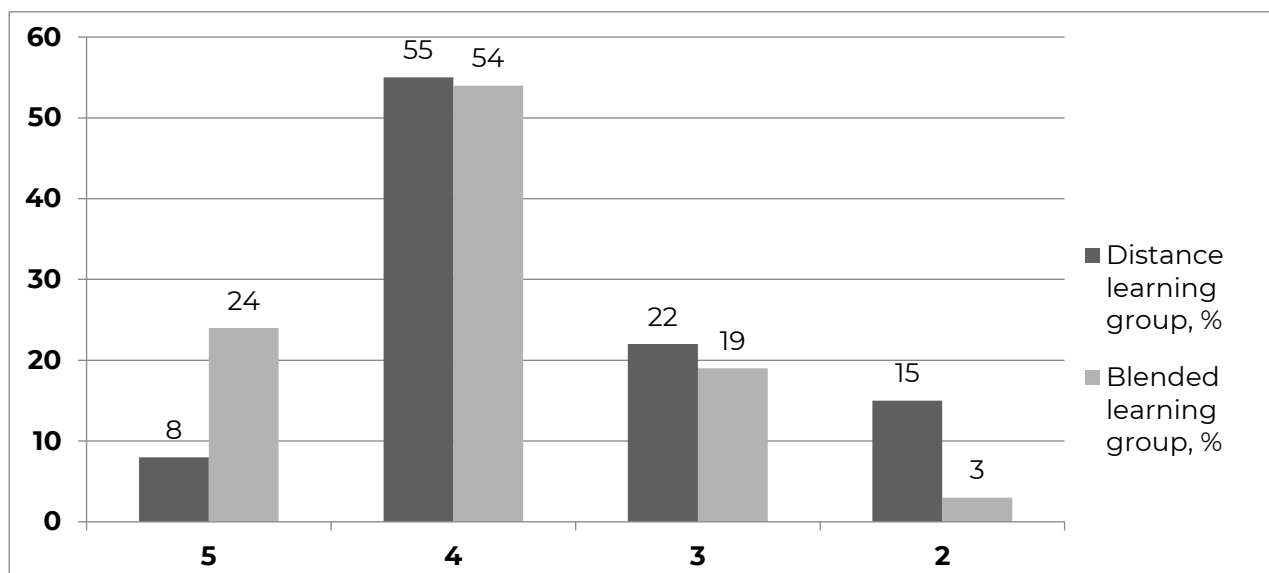
We decided to test the hypothesis about the effectiveness of blended learning on the example of the Flipped Classroom model in comparison with the online learning format. The study was conducted on the basis of Ukrainian educational institutions. The respondents were students of the first year of study in the specialty "Psychology".

The total sample was 200 people, from which 2 groups of 100 people were formed. The first group included respondents who were trained in a distance format (online training). The second group included students who were trained in the same subjects, but under the conditions of the Flipped Classroom blended learning model.

The first aim of our study was to compare the academic semester results of the respondents of both groups. The results are clearly presented in Figure 1.

Figure 1

Comparison of the performance of respondents in both groups at the end of the academic semester



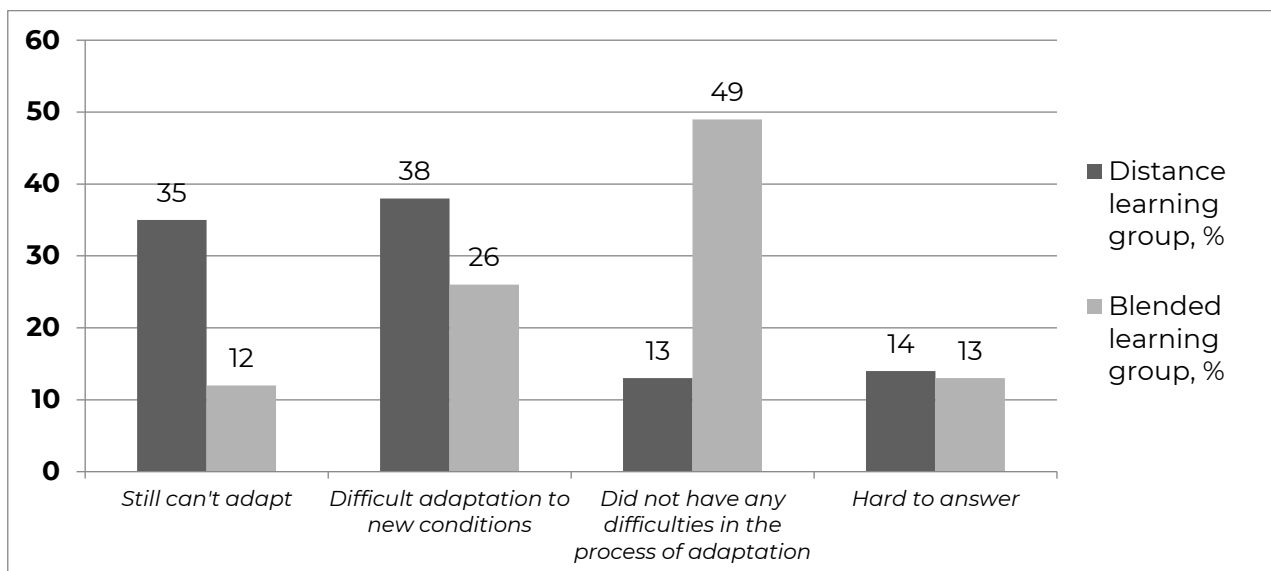
As can be seen from the presented diagram, only 8% of the respondents who took the course in an online format received a mark of 5 at the end of the academic semester, while almost a quarter (25%) of the students of the second group who took the course in blended learning conditions received the highest score ($\varphi_{emp.} = 3.185$). Almost half of the respondents in both groups finished the semester with a score of 4, about a fifth received 3 points, according to these indicators, the difference can be considered insignificant.

It is worth noting that 15% of the respondents of the first group received the lowest score at the end of the semester, while only 3% of the students of the second group had a score of 2 ($\varphi_{emp.} = 3.162$). Thus, we can confidently assert that there are statistically significant differences between the results of the respondents of both groups.

The next stage of our research was the study of the process of adaptation of participants in the educational process to innovative conditions. The results of the survey are clearly presented in Figure 2.

Figure 2.

The results of a survey of respondents on the topic "How can you describe your adaptation to a new format of education?"



After analyzing the results, we came to the conclusion that the adaptation process, which, as previously established, is one of the most important aspects of an effective educational process, proceeds much easier in the conditions of the «Flipped Classroom» blended learning model, while respondents' adaptation to online-format had a number of problems. In order to study the adaptation process in more detail, we interviewed respondents, asking them to describe the main problems they faced.

Thus, the respondents of the first group, who took part in the online format, mentioned: the lack of live contact with the teacher (68%), the low level of interaction with the team (52%), problems with self-organization during the educational process (50%), poor communication quality (35%), low level of computer competence of the teacher (27%), fatigue and overexertion (20%), lack of learning motivation (15%). At the same time, among the problems characteristic of adapting to blended learning, respondents mentioned the complexity of

the organization of the educational process (48%) and high fatigue (25%).

Suggested on the blended learning as the best way to integrate distance technologies into the system education has great potential and gives students the ability to quickly adapt to modern processes of transformation of the education system. However, a great emphasis on independent work of students and the ability to productively organize their time puts forward the requirements for effective pedagogical accompaniment and requires the solution of a number of problems, namely:

1. adaptation of available materials to new pedagogical tools and educational environment, as well as to the characteristics of students; to the current level of knowledge, personal needs and external factors (maximum accessibility of education, regardless of the financial capabilities of the student);
2. support and control of the student's educational activities by the teacher, adjustment of the work plan in case of poor progress;
3. providing constant feedback at different levels of interaction and support and with the provision of various communication channels;
4. intensification of the learning process through the implementation of various types of interactivity and the use of active learning methods.

Scientists and specialists in the field of blended learning argue that today there is no universal conceptual apparatus of blended learning. Most often, blended learning refers to a wide range of situations of integrating online learning into the traditional model. The most popular definition of blended learning emphasizes the combination of "face-to-face and distance learning, with one of

them being basic depending on the preferred model" (Adams et al, 2017).

However, in our opinion, such definitions are not fully reflect characteristic features of blended learning, since the maximum potential from this integration can only be unlocked by creating an integral whole, synergy between the two models, which ensures the personalization of learning and the adequacy of the methods used (Nebytova, 2022).

At the same time, we maintain the point of view of the authors, pointing out the need for systematic planning of the content and structure of the course, the use of innovative teaching methods and knowledge control, which in turn allows us to consider blended learning as pedagogical approach that improve the efficiency of the educational process by improving the level of interaction between all its participants. Therefore, we assume that in order to achieve the planned results in blended learning, the development of a pedagogical model is mandatory.

The essence of the blended learning or "Flipped Classroom" model lies in "turning over" the key elements of the educational process, while the "flipping" is carried out not only in terms of stages (classical classroom work is done at home in the "Flipped Classroom" model), but also in the transformation of the role teacher and student responsibility for their learning.

So, the teacher ceases to be the main translator information, giving way to other sources (first of all, the Internet environment), at the same time there are prerequisites for the development of learning in cooperation (peer-assisted learning, collaborative learning; cooperative learning). In current educational conditions, this model is based on the active implementation

online learning environment, as well as strengthening the role of independent work and creative activity of students, which in turn requires special attention to the problem of planning, forecasting and designing the course, as well as organizing the educational process.

Available studies have shown that the Flipped Classroom model makes it possible to significantly increase the level of independent extracurricular work of students. Also, within the framework of this model, there is an increase in the level of their educational autonomy, which helps to increase the internal motivation of the participants in the educational process, allows them to effectively use various pedagogical tools, which, together with the pedagogical competence of the teacher, makes it possible to jointly building individual educational trajectories.

CONCLUSIONS

The COVID-19 pandemic, which the whole world was forced to face, has had an irreversible impact on the education sector. By limiting the teacher's existing pedagogical tools due to quarantine restrictions and almost completely changing the educational environment, the pandemic has challenged the classical, well-established learning process.

Remote educational technologies, namely online labs, conferences, interactive whiteboards, educational Internet platforms, chats, websites, blogs and instant messengers, have become almost the only adequate solution to the problem of organizing the educational process in the new conditions. Such a sharp transition from classical, "live" teaching to an innovative form forced educational institutions to radically restructure the learning process, which was accompanied

by the process of students' adaptation to new, unusual conditions. It is also impossible to predict how online learning will affect the academic performance of students.

At the same time, online education has a number of negative aspects that are worth mentioning: online education is very demanding on the student's self-discipline; can negatively affect the motivation of students, and sometimes interfere with the formation of the necessary working environment; students have the opportunity to turn off the webcam and microphone, formally remaining in the webinar room, but at the same time dropping out of the educational process, which negatively affects group dynamics; due to the lack of the need for a live visit to the educational institution, the campus culture will be gradually eradicated due to the online education model; high demands on the technical equipment of both sides of the educational process; focus on technical means and long-term concentration on the monitor screen, as prerequisites for including a student in a distance learning environment, leave an imprint on his internal state.

At the same time, blended learning is becoming increasingly popular as a form of combining "live" communication with the teacher and teams and distance learning. Blended learning includes many models, one of which is the Flipped Classroom. We decided to compare the academic success of students who study online with students included in the blended learning system. Thus, only 8% of the respondents who took the course in an online format received a mark of 5 at the end of the academic semester, while almost a quarter (25%) of the students of the second group who took the course in

blended learning received the highest score.

We also asked respondents to evaluate the process of their own adaptation to new conditions (distance and blended learning). The results of the survey showed that the adaptation process proceeds much easier in the conditions of the Flipped Classroom blended learning model, while the adaptation of respondents to the online format had a number of problems. Thus, the respondents of the first group, who were trained online, mentioned the lack of live contact with the teacher, the low level of interaction with the team, problems with self-organization during the educational process, poor communication quality, low level of computer competence of the

teacher and related problems, fatigue and overstrain, lack of motivation to learn.

Thus, we came to the conclusion about the low efficiency of distance learning in the absence of a face-to-face component. In our opinion, online learning has a high potential, which is difficult to realize due to the high demands on technical support, communication problems in an unfamiliar space, and the lack of social presence of participants in the educational process. Blended learning, as a combination of full-time and distance learning, can offset the shortcomings of online learning and realize its potential. The next step in our research will be to compare the performance of different blended learning models.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Adams Becker, S., Cummins, M., Davis, A., Freeman, A., Hall Giesinger, C., & Ananthanarayanan, V. (2017). *NMC Horizon Report: 2017 Higher Education Edition*. Austin, Texas: The New Media Consortium. <https://eric.ed.gov/?id=ED582134>
- Aditya, B. R., Ferdiana, R., & Kusumawardani, S. S. (2021). Categories for Barriers to Digital Transformation in Higher Education: An Analysis Based on Literature. *International Journal of Information and Education Technology*, 11(12), 658–664. <https://doi.org/10.18178/IJiet.2021.11.12.1578>
- Albrahim, F.A. (2020). Online Teaching Skills and Competencies. *Turkish Online Journal of Educational Technology-TOJET*, 19(1), 9-20.
- Apandi, A.M., & Raman, A. (2020). Factors Affecting Successful Implementation of Blended Learning at Higher Education. *International Journal of Instruction, Technology, and Social Sciences*, 1(1), 13-23.
- Bazelais, P., Doleck, T., Lemay, D.J. (2018). Investigating the predictive power of TAM: A case study of CEGEP students' intentions to use online learning technologies.

Education and Information Technologies, 23(1), 93–111.
<https://doi.org/10.1007/s10639-017-9587-0>

Bruggeman, B., Tondeur, J., Struyven, K., Pynoo, B., Garone, A., & Vanslambrouck, S. (2021). Experts speaking: Crucial Teacher Attributes for Implementing Blended Learning in Higher Education. *The Internet and Higher Education*, 48, [100772].
<https://doi.org/10.1016/j.iheduc.2020.100772>

Castro, R. (2019). Blended Learning in Higher Education: Trends and capabilities. *Education and Information Technologies*, 24(4), 2523-2546.
<https://doi.org/10.1007/s10639-019-09886-3>

Chernenko, A. (2021). Information and Digital Competence as a Key Demand of Modern Ukrainian Education. *Educational Challenges*, 26(2), 38-51.
<https://doi.org/10.34142/2709-7986.2021.26.2.04>

Ching, K.H., Teoh, A.P., & Amran, A. (2020). A Conceptual Model of Technology Factors to InsurTech Adoption by Value Chain Activities. *2020 IEEE Conference on e-Learning, e-Management and e-Services (IC3e)*, 88-92.
<https://doi.org/10.1109/IC3e50159.2020.9288465>

Dabbagh, N., & Kitsantas, A. (2012). Personal Learning Environments, Social Media, and Self-Regulated Learning: A Natural Formula For Connecting Formal And Informal Learning. *The Internet and Higher Education*, 15(1), 3-8.
<https://doi.org/10.1016/j.iheduc.2011.06.002>

Huiwen Gao (2021) The Status Quo of Online and Offline Moral Education Classroom Barriers and Connecting Paths. *Educational Philosophy and Theory*, 54(11), 1868-1877. <https://doi.org/10.1080/00131857.2021.1945439>

Iyer, S.S., Seetharaman, A., & Maddulety, K. (2020) Education Transformation Using Block Chain Technology – A Student Centric Model. In S.K. Sharma, Y.K. Dwivedi, B. Metri, N.P. Rana (Eds.), *Re-imagining Diffusion and Adoption of Information Technology and Systems: A Continuing Conversation. TDIT 2020. IFIP Advances in Information and Communication Technology*, Vol. 617 (pp.3-9). Springer, Cham.
https://doi.org/10.1007/978-3-030-64849-7_1

Jdaitawi, M. (2020). Does Flipped Learning Promote Positive Emotions in Science Education? A Comparison Between Traditional and Flipped Classroom Approaches. *Electronic Journal of E-learning*, 18(6), 516-524.
<http://dx.doi.org/10.34190/JEL.18.6.004>

Kim, H.J., Lee, J.M., & Rha, J.Y. (2017). Understanding the Role of User Resistance on Mobile Learning Usage among University Students. *Computers & Education*, 113, 108–18.
<http://dx.doi.org/10.1016/j.compedu.2017.05.015>

Lackovic, N., Kerry, R., Lowe, R., & Lowe, T. (2017). Being Knowledge, Power and Profession Subordinates: Students' Perceptions of Twitter for Learning. *The Internet and Higher Education*. 33, 41–8. <http://dx.doi.org/10.1016/j.iheduc.2016.12.002>

- Mata, L., Lazar, G., & Lazar, I. (2016). Effects of Study Levels on Students' Attitudes Towards Interactive Whiteboards in Higher Education. *Computers in Human Behavior*, 54, 278–89. <https://doi.org/10.1016/j.chb.2015.07.044>
- Nahaev, V., & Hrynova, Y. (2020). Pedagogical Model of Organization of Distance Teaching and Learning in the Conditions of Network Technology of Students' Educational and Creative Activity Management. *Educational Challenges*, 25(1), 82–95. <https://doi.org/10.34142/2709-7986.2020.25.1.07>
- Nambiar, D. (2020). The Impact of Online Learning During COVID-19: Students' and Teachers' Perspective. *The International Journal of Indian Psychology*, 8(2), 783–793. <http://dx.doi.org/10.25215/0802.094>
- Nebytova, I. (2022). Scientific and Pedagogical Support for Future Primary School Teachers during Teaching Practice. *Educational Challenges*, 27(1), 80–91. <https://doi.org/10.34142/2709-7986.2022.27.1.07>
- Novikova, V. Ye. (2021). Formuvannia profesiinoi kompetentnosti maibutnikh fakhivtsiv kharchovykh ta pererobnykh vyrobnytstv v umovakh dystantsiinoho navchannia [Formation of Professional Competence of Future Specialists of Food and Processing Industries in the Conditions of Distance Learning]. *Scientific bulletin of South Ukrainian National Pedagogical University named after K.D. Ushynsky*, 4(137), 38–44 (in Ukrainian).
- Oliveira, G., Grenha Teixeira, J., Torres, A., & Morais, C. (2021). An exploratory study on the emergency remote education experience of higher education students and teachers during the COVID-19 pandemic. *British Journal of Educational Technology*, 52, 1357–1376. <https://doi.org/10.1111/bjet.13112>
- Rabia, Yilmaz, Melike, Aydemir, Selcuj, Karaman, Yuksel, Goktas. (2016). Social Presence in a Three-Dimensional Virtual World Used for Distance Education. *Croatian Journal of Education*, 18(3), 18–22. <https://doi.org/10.15516/cje.v18i3.1664>
- Ramírez-Correa PE, Arenas-Gaitán J, Rondán-Cataluña FJ. (2015). Gender and Acceptance of E-Learning: A Multi-Group Analysis Based on a Structural Equation Model among College Students in Chile and Spain. *PLOS ONE*. 2015, 10(10), e0140460. <https://doi.org/10.1371/journal.pone.0140460>
- Seethal, K., & Menaka, B. (2019). Digitalization of Education in 21ST Century: A Boon or Bane. *Higher Education*, 43, 196.
- Serrano, D. R., Dea-Ayuela, M. A., Gonzalez-Burgos, E., Serrano-Gil, A., & Lalatsa, A. (2019). Technology-enhanced Learning in Higher Education: How to Enhance Student Engagement through Blended Learning. *European Journal of Education*, 54(2), 273–286. <https://doi.org/10.1111/ejed.12330>
- Siegel, D., Acharya, P., & Sivo, S. (2017). Extending the Technology Acceptance Model to Improve Usage & Decrease Resistance Towards a New Technology by Faculty in Higher Education. *Journal of Technology Studies*, 43(2), 58–69. <http://dx.doi.org/10.21061/jots.v43i2.a.1>

Smith, K., & Hill, J. (2019). Defining the nature of blended learning through its depiction in current research. *Higher Education Research and Development*, 38(2), 383–397. <https://doi.org/10.1080/07294360.2018.1517732>

Vaportzis, E., Clausen, M.G., & Gow, A.J. (2017). Older Adults Perceptions of Technology and Barriers to Interacting with Tablet Computers: A Focus Group Study. *Front Psychol*, 8, 1687. <https://doi.org/10.3389/fpsyg.2017.01687>

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

ДИСТАНЦІЙНЕ НАВЧАННЯ В ВИЩІЙ ОСВІТІ: ДОСВІД ПАНДЕМІЇ COVID-19 ТА ВІЙНИ В УКРАЇНІ

Дистанційне навчання стало одним із найпопулярніших освітніх трендів 21 століття, а пандемія COVID-19 та війна в Україні лише прискорили процес його інтеграції в освітній сектор.

Метою нашої роботи є вивчення впливу навчання в форматі онлайн на адаптацію та навчальну успішність студентів, а також пошук перспективних аналогів дистанційному навчанню.

Методологія. Крім комплексного теоретичного аналізу, який включав в себе порівняння різних підходів і досліджень, ми використовували метод опитування респондентів, до якого було залучено 200 студентів-першокурсників з 6 українських ЗВО (ХНПУ ім. Г.С. Сковороди, КНУ ім. Т.Г. Шевченка, Харківський національний університет імені В. Н. Каразіна, Національний технічний університет Харківський політехнічний інститут, Державний біотехнологічний університет, Харківський національний університет радіоелектроніки). Опитування проходило в форматі онлайн за допомогою платформи гугл форм в період з 19 по 26 грудня 2021 року, підрахунок та візуалізація отриманих даних були виконані за допомогою інструментарію Майкрософт. Для встановлення відмінностей між показниками академічної успішності респондентів двох груп був використаний статистичний критерій Фішера.

Результати. Ми вирішили порівняти успішність студентів, які навчаються онлайн, зі студентами, залученими до системи змішаного навчання. Так, лише 8% респондентів, які проходили курс в онлайн-форматі, наприкінці навчального року отримали найвищий бал, тоді як майже чверть (25%) студентів другої групи, які проходили курс в форматі змішаного навчання, отримала аналогічний бал. Також ми попросили респондентів оцінити процес власної адаптації до нових умов (дистанційне та змішане навчання). Результати опитування показали, що процес адаптації проходить набагато легше в умовах моделі змішаного навчання, тоді як адаптація респондентів до онлайн-формату мала ряд проблем.

Висновок. Онлайн-навчання має високий освітній потенціал, який важко реалізувати через високі вимоги до технічного забезпечення, комунікативні проблеми спілкування в незвичному просторі та недостатній рівень соціальної присутності учасників навчального

процесу. Змішане навчання, як поєднання очного та дистанційного навчання, може компенсувати недоліки онлайн-навчання та повністю реалізувати його потенціал. Перспективним напрямком подальших досліджень бачиться порівняння ефективності інших моделей навчання.

КЛЮЧОВІ СЛОВА: академічні успіхи, дистанційне навчання, система вищої освіти України, пандемія COVID-19, досвід, студент, війна.

CITE THIS ARTICLE AS (APA style):

Opanasenko, Ya., & Novikova, V. (2022). Distance Learning in Higher Education: The Experience of the Covid-19 Pandemic and War in Ukraine. *Educational Challenges*, 27(2), 151-168. <https://doi.org/10.34142/2709-7986.2022.27.2.11>



<https://doi.org/10.34142/2709-7986.2022.27.2.12>

PECULIARITIES OF PEDAGOGICAL INTERNSHIP ORGANIZATION FOR FUTURE SPECIALISTS OF FOREIGN PHILOLOGY IN BLENDED LEARNING

Received: 27/08/2022

Accepted: 29/09/2022

Oksana REZVAN¹, & Alla KROKHMAL²



¹ Doctor of Sciences (Pedagogy), Ph.D. in Pedagogy, Full Professor, Head of Psychology, Pedagogy and Language Training Department, O. M. Beketov National University of Urban Economy in Kharkiv, Ukraine.


✉ E-Mail: rezvanoksana1@gmail.com

 <https://orcid.org/0000-0002-7371-3605>



² Ph.D. in Pedagogy, Associate Professor, Foreign Languages Department, O. M. Beketov National University of Urban Economy in Kharkiv, Ukraine.

✉ E-Mail: allakrokhumal@ukr.net

 <https://orcid.org/0000-0002-9490-489X>

ABSTRACT

The competitiveness of the professional training of future philologists depends on the opportunities for professional realization, due to the formation of specific competencies, one of which is the competency of teaching activities. The specified factor encourages the creation of students' conditions to obtain opportunities for professional realization in the practical activity of a teacher in secondary education.

The conditions of a prolonged pandemic require the correction of the implementation of any type of educational activity by transferring it to the mode of distance learning which causes the need for students' special training for pedagogical activities in the conditions of the mixed and distance mode in work of a secondary education.

*The **purpose** of the article is to analyze the features of pedagogical internship organization for students of foreign philology in a mixed form of education.*

© Oksana REZVAN, & Alla KROKHMAL, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

The **methodology** is the analysis of scientific approaches to the definition the concepts "pedagogical practice of future philologists", "distance learning", "information and communication technologies (ICT)"; results' presentation in the organization of pedagogical practice for philology students; determination of effective means for implementing the practical activities of an English language teacher in the conditions of distance learning which is based on the results of the pedagogical practice for philology students.

Results. The pedagogical practice of philology students is aimed at forming the practical skills necessary for teaching a foreign language, in particular in all types of speech activity: speaking, reading, writing, listening. The formation of students' abilities to take into account the peculiarities of the presentation of educational information and the practice of specific foreign language skills for learners in the conditions of distance learning acquires importance.

The analysis of the options of several platforms for the implementation of distance learning of a foreign language revealed the greatest effectiveness of the ZOOM program which was confirmed among other things by its selection as a common platform for training by basic colleges in O.M. Beketov National University of Urban Economy in Kharkiv (Ukraine).

According to the results of pedagogical practice in the distance learning mode of the basic colleges, the need to correct the program of practices and the content of psychological and pedagogical disciplines and the methodology of teaching a foreign language, taking into account the characteristics of the teacher's activity in the conditions of the distance mode of work with the study group, was determined.

In **conclusion** it should sum up that it is important to focus students on a clear distribution of time for the implementation of all types of speaking activities in a foreign language for students in the classroom and the reflection of these tools at specific stages of a lesson, taking into account the time of assessment and reflection.

KEYWORDS: Pedagogical Practice, Future Philologists, Foreign Language, Blended Learning, Distance Learning.

INTRODUCTION

Technological means of distance learning are increasingly becoming a compulsory element of the organization in the modern educational process. In the conditions of a pandemic, they become an irreplaceable way of conducting educational classes, as well as organizing all possible types of student practices. The effectiveness of any modern training is determined by the

opportunities which speciality gives to a graduate for employment.

According to the professional training of future specialists in foreign philology, the usual way of professional implementation in addition to translation is teaching which is represented by various forms of its implementation such as course training of clients (including specific organizations), tutoring services, children and young

people's education in the high school program, etc.

In view of the above information, it is more popular among entrants in the labour market of educational services are those curricula in foreign philology which contain part of the pedagogical training of specialists including pedagogical internship (Specht, 2022).

Blended learning has been researched by J. Rivera (Rivera, 2019), who investigated the importance of blended learning in education as a method for teaching and learning Foreign Languages Subjects at university level. D. Garrison & H. Kanuka (Garrison, Kanuka, 2004) provided the transformative potential of blended learning in the context of the challenges facing higher education.

Due to the long pandemic caused by COVID-19 the educational process in educational establishments of all levels it has been carried out mixed learning for three years that is sometimes distance learning (if the pandemic level increases). This socio-hygienic situation highlights the necessity to use the technological means of distance learning by educators.

The **purpose** of the article is to analyze the features of pedagogical internship organization for students of foreign philology in a mixed form of education.

METHODOLOGY

The methodological principles of the study determine the analysis of scientific approaches to the definition of "pedagogical internship of future philologists", "distance learning", "information and communication technologies (ICT)"; presenting the results of the pedagogical internship organization of students-philologists of O. M. Beketov National University of Urban Economy in Kharkiv (KhNUUE);

determination of the effective means of realization of English teacher's practical activity in distance learning according to the results of pedagogical internship of students-philologists.

In the article it has been used the methods of scientific analysis to distinguish ideas about the degree of research of the problem; organization of the experiment of students' pedagogical practice in a distance format to present the author's experience of practical activity; reflections on the results of practice with the generalization of positive and negative elements that were determined depending on the distance form of its organization as an invitation to a professional discussion of specialists in the field of pedagogical and methodical sciences.

RESULTS

The works of I. Barabash (2015), N. Bezliudna (2021), V. Koval (2013), S. Surhova (2020) are devoted to the problem of practical training of future teachers. Focusing on the classical fundamental provisions of the organisation of professional training of future teachers, the researchers did not analyse the effectiveness of mixed forms of organisation of pedagogical practices, as they did not need such a social order. At the same time, it is now necessary to identify and research new approaches to the practical training of teachers in view of the regular social challenges caused by the global pandemic.

The work of I. Barabash (2015) emphasizes the need to form the technological skills of the future philologist, related to the organization of the educational process. The author emphasizes the need to link the results of pedagogical internship with research work of students, forming their competencies to use the methods of

scientific knowledge such as observation, analysis, generalization and etc.

In addition to the main practical tasks performed by the pedagogical internship in the training of future teachers, it is necessary to single out additional ones forming students' skills to carry out pedagogical communication with teachers, students and administration; to find and use the results of innovative experience of teaching the discipline by modern methodologists. All these things affect the awareness of the possibility of choosing a pedagogical profession.

According to V. Koval, "professional training of future teachers of philology" is a purposeful, dynamic, innovative process adapted to the real conditions of higher education which is determined by the competitiveness of universities in the market of educational services" (Koval, 2013, p. 166).

M. Vechirko notes the importance of forming the future philologist's needs and ability to solve pedagogical problems in unpredictable, unplanned pedagogical situations which involves mastering the research approach to teaching. According to the author, this is facilitated by seminars and practical classes in the form of conferences and discussions, debates, competitions for pedagogical projects, the use of various creative forms of work where students have the opportunity to express their abilities and capabilities such as creative tasks taking into account the implementation of interdisciplinary links contribute to the formation of activity and the foundations of personal pedagogical experience of the future teacher (Vechirko, 2012).

The increasing attention of scientists to distance learning technologies is currently connected with the COVID-19 pandemic. At the same time, the methodological

expediency of using distance learning is considered from two positions: as a form of education and as one of the components of the entire educational system. Distance education is a form of education in which the teacher and the learner interact with each other at a distance and all the components characteristic of the educational process (goal, content, methods, teaching aids and organizational forms) are preserved, and all this is implemented with the help of specific means of Internet technologies or other interactive means.

Scientists' increasing attention to distance learning technologies is currently linked to the COVID-19 pandemic. At the same time, the idea of using digital technologies is not new for scientific discourse. It is considered from two positions: as a form of learning and as one of the components of the entire educational system. Under the distance form of learning, the scientist sees a form of learning in which the teacher and the student interact at a distance and retain all the components of the educational process (purpose, content, methods, teaching aids and organizational forms), and all this is realized specific means of the Internet technologies or other interactive means.

The main priorities of the application of these technologies, scientists identify the provision of a large amount of authentic information; influence on all channels of perception using multimedia technologies (texts, graphics, sounds, animations, video); adaptability; nonlinearity of information provision; high interest in the educational process (Chernenko, 2019).

Using these digital resources, integrating them into the learning process more effectively it can be solved a number of didactic tasks:

- make classes more visual and interesting increase the intensity of the educational process;
- provide instant feedback;
- to form a stable motivation for cognitive activity;
- activate mental abilities;
- involve passive students;
- to form skills and abilities to ensure information and digital competence;
- to form elements of abstract and logical thinking;
- promote individualization and intensification of learning;
- to teach students to work independently with digital resources and tools, etc. (Chernenko, 2019).

Increased attention to distance learning has been reflected in the numerous works of scientists related to the study of certain disciplines and the acquisition of a specific specialty. Scientists S. Surhova and O. Faichuk (Surhova, Faichuk, 2020,) focused on the peculiarities of the organization of pedagogical internship of future philologists in terms of distance learning. The authors note that the change in the form of an internship has led to the need to revise its classic assessment results that is the ability to remove from the assessment of psychological and pedagogical characteristics of the student, as it is impossible to have a personal interaction that precludes objectivity.

"Today, in the conditions of the COVID-19 pandemic, it is impossible to ensure the fulfilment of all the tasks of complex pedagogical internship fully. Such aspects of the teacher's work as communication with students, paper work, the work of the head of the club remain out of the

attention of students and leaders of the internship" (Surhova, & Faichuk, 2020, p. 92).

At the same time scientists appreciate the possibilities of modern technologies of the MOODLE and ZOOM platforms with the help of which the process of psychological and pedagogical practice of future philologists is as close as possible to the real conditions of the educational process.

A. Kovalenko details the means of organizing a training session in the distance mode:

- multimedia presentation which allows you to influence several types of memory: visual, auditory, emotional, and sometimes motor, and can be useful for organizing and conducting auditions, translating texts, composing dialogues;
- training;
- discussion (subject to appropriate selection of issues for discussion);
- web-quests a type of search activity in which students obtain the necessary information on the Internet at the specified addresses (Kovalenko, 2021).

According to O. Trotsenko, O. Bilyk and N. Pyliachyk, the positive results of distance learning can be considered the reduction of future teachers' anxiety which was concluded based on the analysis of ICT use in pedagogical internship. The results of the experiments in at the Vasyl Stefanyk Precarpathian National University and the Pavlo Tychyna Uman State Pedagogical University showed that future teachers who completed the curriculum on the peculiarities of the use of ICT in teaching felt more confident during foreign language lessons, and their level of anxiety

was much lower (Trotsenko, Bilyk, & Pyliachyk, 2020).

The positive effect of the use of ICT in the study of a foreign language is discussed in the work of I. Kostikova and H. Bezbavna (2019). Thus, the researchers claim that the use of the Internet with a variety of information and resources, means of communication contributes to the formation of students' competencies in language and speech (reading and writing), generally has a positive effect on English learning, in developing motivation and interest (Kostikova, & Bezbavna, 2019). According to the authors' conclusions we can note the importance of the direction of students-interns in the use of ICT in the development and implementation of classes for students both in distance learning and in real presence.

The development of distance learning technologies and ICT has allowed solving the problem of transferring the educational process in educational institutions to a mixed learning quickly and effectively which has become an unalterable way of learning in the pandemic. At the same time teachers and students had to adapt to distance working conditions and master typical online and distance communication platforms such as ZOOM, Meet, Teams and others.

It should be noted that in general distance learning is divided into synchronous and asynchronous forms. In the synchronous form, all participants are connected online at the same time, although they are geographically located in different places (for example, video conferencing). Asynchronous learning mode allows you to learn in a personally convenient mode using the services of learning platforms.

The most popular example of asynchronous distance learning is the MOODLE platform, due to the fact that in

the modern world there are more than 68000 registered Moodle sites in 235 countries (both eastern, for example: China, Taiwan; and western: Australia, America, UK and others), 28 million users and 2.5 million courses. Among the most famous users of this platform are: the London School of Economics, New York State University, the Open University of Great Britain and the giant Microsoft companies (Bakhmat, & Babakina, 2014, p. 43–50).

Currently the scientific discourse presents many studies that address the problems of using these services in the implementation of various forms of educational process. First of all, we were interested in those related to the teaching of foreign languages and the organization of pedagogical internship. Thus, in the article by A. Yankovets and O. Yankovets (2020), the Zoom service is presented as one that provides an opportunity to work with a full range of educational materials, as well as for contact forms of work. The authors highlight the advantages of using this platform:

- invariability of the format: "teacher audience" which is manifested in the possibility of individual two-way telecommunication of the higher education establishment's student with a teacher and other higher educational establishments in learning;
- the ability to record and play distance lessons in a convenient mode;
- a wide range of features of this program, in particular working with documents in Word, Doc, Pdf, using the White Board function and the use of audio and video materials in the learning process (Yankovets, & Yankovets, 2020).

In teaching a foreign language, the Zoom platform allows you to use all the resources needed to develop and improve your speaking skills: reading, writing, listening and speaking. Thus, the online presentation (report format) allows you to update the student's monologue; reading is organized through the presentation on the screen of text in a slide format (reading in simultaneous action) or an attached text file (reading in asynchronous mode, for example, when doing homework). Audio broadcasting allows you to improve the skills of auditory perception of the text.

We consider the "proof-reader" function to be useful for the learning interaction of the ZOOM platform, which provides an opportunity to correct student work and make textual edits with the help of a marker.

The teacher manages the course of the lesson also through the function of turning on / off the screen demonstration which allows you to normalize the order of presentation of individual tasks by students.

Explanation of new material, in addition to prepared information in the form of slides or tables, can be carried out in a gradually dynamic mode of application of the "whiteboard" on which the teacher can write, erase and add information. Therefore, we consider the ZOOM application to be the most effective for conducting foreign language classes, as its options allow you to improve all communication skills, as well as apply various forms and methods of work.

According to scientists N. Bezliudna and N. Dudnyk, the organization and holding of an educational event (educational hour, subject evening, excursions and etc.) is a problematic element of pedagogical internship in the mode of distance learning which is one of the tasks of the

future primary school teacher classes (Bezlyudna, & Dudnyk, 2021). Given the fact that in the conditions of quarantine it is impossible to hold a classical educational event the authors have developed substitute tasks to ensure the formation of educational competencies of future teachers:

- analysis of the educational event of the basic educational institution, conducted earlier and saved in video;
- development of the author's scenario of the thematic event with its analysis;
- identifying ways to organize educational work of the school in terms of distance learning - in accordance with the plan of educational work and taking into account the needs of students, parents (use of synchronous and asynchronous means of communication; limiting the number of applications and platforms; site, creation of local communities and organization of their work, selection of materials and tools for interactive educational activities, organization of students to work on thematic projects in pairs, groups – with instructions and algorithms, assistance to parents and teachers in using digital devices and various applications creation of motivational letters of thanks for students and parents - for cooperation in quarantine.

The generalization of the experience of scientists in the organization of pedagogical practices of students in a pandemic allowed identifying the main aspects of the preparation of future philologists for teaching with the use of distance learning tools, which include:

- acquaintance with the main platforms for the implementation of distance learning in educational institutions and

analysis of the effectiveness of their applications for learning a foreign language in all types of speech activities;

- selection of one of the most optimal platforms and detailed presentation of all its possibilities in learning a foreign language to pupils (students);
- selection of methodological materials that are optimal for learning a foreign language of students on the specified platform;
- preparation of each lesson taking into account both the technical capabilities of the platform and the presentation of each of the types of speech activities of students (speaking, listening, writing, reading);
- taking into account in the organization of classes time for technical inclusion of students;
- adjusting the classic elements of the lesson (lesson) taking into account the capabilities of the selected platform.

Thus, the preparation of future philologists for practical teaching activities should be based on the formed theoretical knowledge of didactics, organization of the educational process and methods of teaching a foreign language. Given the peculiarities of the educational process in a pandemic, students must be ready to implement training both in real presence and in a distance format. Students pay special attention to the review of modern platforms that allow for the implementation of distance learning and provide opportunities to form in the student all kinds of speech activities.

These generalised provisions were confirmed during the organisation and carrying out of pedagogical practice for students by the speciality 035 "Philology.

English Philology and Translation" of O. M. Beketov National University of Urban Economy in Kharkiv.

Preparation for pedagogical practice begins at the university in the teaching of disciplines "Pedagogy" (1st year) and "Methods of teaching a foreign language" (3rd year). Close cooperation of teachers of these disciplines allows developing a theoretical and practical readiness to implement methodological skills in the practical activities of students. Thus, getting pedagogical and methodological competence, students focus on taking into account the purpose of teaching a foreign language, the characteristics of the audience to be studied (adults or children), the purpose of learning a foreign language.

In addition, future philologists gain knowledge of classical pedagogy (didactic laws of modern lessons, the realization of the threefold purpose of the lesson) and age psychology (taking into account the age characteristics of children's perception of information, development of their thinking, attention, imagination, etc.).

Students spend a lot of time solving case problems which are aimed at guiding future professionals to understand the current problems of high school, as well as the formation of critical thinking, in particular, in determining the logical connections and patterns of teachers' idea, Pedagogy of cooperation (late XX century) and modern innovations. For example, the idea of support and large blocks in learning turned into computerised and modular learning; the idea of anticipation is reflected in the modern technology of inverted learning (inverted lecture – in high school); the idea of a personal approach is presented in the

model of implementation of diversified forms of learning.

The main task of the symbiosis of professional methodological and pedagogical competence in the preparation of future philologists for teaching is to bring theoretical knowledge to the level of technology. To achieve this goal in the educational process, active teaching methods are used which allows students to consciously approach the knowledge aspect, to realize the practical significance of the theory, to be able to apply it in practice; to use mobile in the conditions of quasi-professional pedagogical activity.

Discovering these issues we consider the use of training technologies, design and modelling of pedagogical situations in seminars and laboratory classes in psychological and pedagogical disciplines is to acquire and develop professional and pedagogical and methodological competencies and professionally significant personality traits, simulation and organizational games, creating a "success situation" for each student, advancing positive emotions during the implementation of creative projects.

At classes of pedagogy and methodology, it is advisable to organize professional tests that simulate the content of the teacher which helps to teach students to solve professional problems, to organize their behaviour in accordance with the requirements of the teaching profession. Future philologists should gain experience of testing in various types of professional and pedagogical communication with students, colleagues, managers and parents of students.

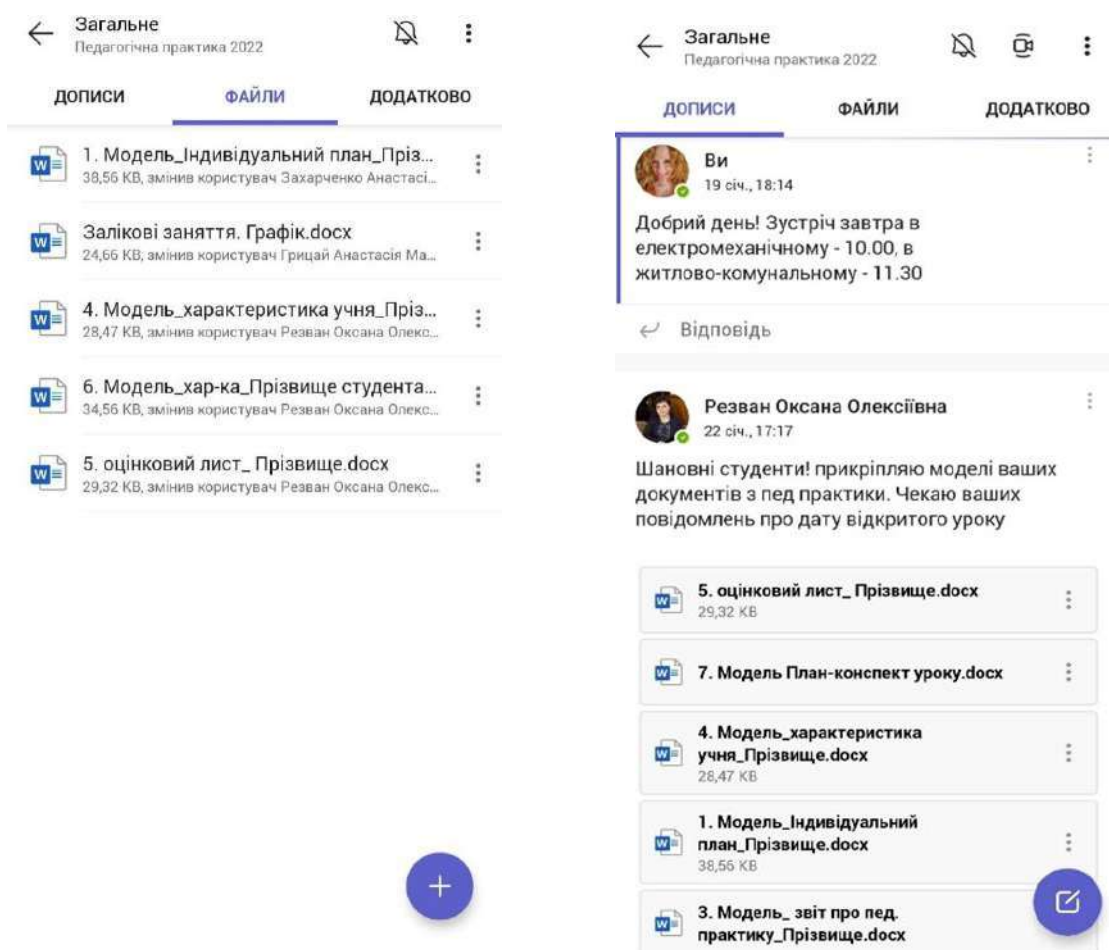
Such quasi-professional activity provides an opportunity to develop important professional competencies: to choose the optimal material for this task, to justify their point of view, active listening and reaction to the comments of colleagues. Modelling of professional situations contributes to the formation of individual professional style at the stage of preparation for practice and its detection and correction in practicing, development of abilities for self-improvement, self-development taking into account their own capabilities and requirements of the profession.

In studying the discipline "Methods of teaching English" students gained knowledge about the basic provisions of the formation of subjects of study (students) of all types of speech activities: speaking, reading, writing and listening; got acquainted with the classic and innovative ways of forming these skills and practiced techniques for their implementation in quasi-professional activities, in particular, with a focus on subjects of different ages and for different purposes of mastering a foreign language.

The organization of pedagogical practice (see Fig. 1) in a remote format is implemented on the platform TEAMS. Before the beginning of pedagogical practice, an introductory conference was organized where students were informed about the requirements for practice, the peculiarities of the organisation of the educational process in basic educational institutions, the mode of interaction with practice leaders.

Figure 1

The organization of pedagogical practice



The result of practical pedagogical activity was to be conclusions about regular pedagogical observations of a group of students in the process of their activities in different classes; description of professional methods of the teacher-mentor; psychological and pedagogical characteristics of one of the students; plan-summary of the test lesson.

In addition, in preparation for the test lesson, students were required to give a test lesson (or part of it - at the choice of the teacher-mentor), attend practical lessons and test lessons of each other in order to gain experience in analytical teaching. To integrate theoretical knowledge into practical skills, trainees focused on the process of analyzing their own test lesson (defining its type, stages,

methods and methods of activity, choosing the content of exercises, types of control and reflection).

Special attention needs to be paid to preparing students for the implementation of practical teaching activities in distance learning. Thus, future philologists were guided to create slides that allowed to summarise, consolidate, present new information; create exercises for compliance, selection, completion of phrases, correction of errors, etc. in order to enhance the cognitive interest of students in the process of learning foreign language grammar; record audio files and select video materials by inserting them into slides in order to organise the development of phonetic hearing and

perception, recognition and use of new vocabulary, etc.

An important element of teaching a foreign language is working with the text which in distance learning can be more organized than in the real learning process. We explain this idea primarily by the ability to display the whole text, part of it or text with omissions of words (for various tasks), which affects the motivation of the audience to a particular type of work; in addition, in the conditions of gradual inclusion of microphones of students the problem of maintenance of physical discipline at a lesson (employment) disappears.

Basic educational institutions of pedagogical practice of students-philologists of O.M. Beketov National University of Urban Economy in Kharkiv are separated structural units of the university: Housing and Municipal College and Electromechanical College. The high level of methodological skills of teachers in these educational institutions allows them to be tasked with managing the practice of students teaching English / German.

The course of pedagogical practice takes place in two stages: analytical within which students get acquainted with the documentation and methodological experience of the teacher-mentor, observe the activities of students in the classroom, attend and analyze the lessons of teachers; and practical which is represented by a test lesson and a number of reporting documents. Before conducting a test lesson, each trainee must agree on the topic and synopsis with the head of the practice, adjust the content of the lesson according to the comments.

The problem of a long pandemic affected the conditions of pedagogical practice, in particular, the analytical stage was

implemented in the usual conditions of the educational process in colleges and the practical stage was distance learning.

The results of the analytical stage of pedagogical practice were notes in the diaries of pedagogical observations of students which reflected their ability to distinguish effective and outdated methods of teachers which as a result of their own practical activities in preparing a lesson influent on the choice of the most effective ways in interaction with pupils (students of colleges).

Opportunities to attend classes of other teachers in a selected group, provided to trainee students in the pre-quarantine period, showed their ability to observe students, analyze their activities in the classroom, communicate, summarize information and draw conclusions in the form of psychological and pedagogical characteristics of each student. However, it should be noted that the creation of such a product of practical activities depends entirely on the possibilities of communication in the mode of real presence so it is a mixed form of pedagogical practice.

Trial and credit classes were carried out by trainee students in the distance mode of colleges, so the main focus was on preparing students to choose forms and methods of activity that would, first, correspond to the content of the lesson (thematic plan); secondly, actualized all types of students' speech activity; thirdly it was convenient to use in the format of the ZOOM platform.

It should be noted that the majority of trainee students managed to achieve good results in the distance learning test. Thus, it was used slide forms of grammatical information; animation and video files, listening resources (including ESL Cold [Practice Listening])

(<https://eslgold.com/practice-listening/>); text files for reading; case problems with phrase stamps for the development of dialogic speech.

At the same time the negative consequences of distance learning were the inability to control the actual inclusion of students, technical delays in feedback, the inability to determine the level of independence of the student in the classroom.

It is worth noting the main problems that were identified in the process of presenting credit classes by students. First, the expediency of using consistent translation of the text by different students in class is questionable, as we consider this type of activity quite conservative and ineffective both in terms of forming foreign language competence and motivating students to learn a foreign language in general.

Secondly, the trainees wanted to show a spectacular lesson, so often did not pay attention to its effectiveness for all (or at least most) students of the study group, in particular, providing the opportunity to detect foreign language proficiency only a small number of attendees remained passive. The third problem for future philologists was the difficulty in allocating time to the stages of the lesson which affected the practice of "giving" grades that is without commenting on them to students and in the absence of reflection on the lesson as a whole.

The final stage of pedagogical practice was the holding of two online conferences: with English teachers of basic colleges where a reasoned assessment of each trainee's work from each mentor was provided; and with practice leaders where there was an analysis of each trainee's lesson with the possibility of dialogic protection of the choice of forms and

methods of educational activities and general assessment.

DISCUSSION

The results of pedagogical practice of students of O. M. Beketov KNUUE, conducted distantly are connected with the experience of other scientists analysed in this article. Thus, the effectiveness of A. Chernenko's opinion (Chernenko, 2019) on the possibilities of distant platforms to ensure regular communication with students both in the form of individual communication and collective discussions has been proven.

We consider A. Kovalenko's conclusions (Kovalenko, 2021) useful regarding the influence of multimedia presentation on the development of students' cognitive and emotional sphere (memory and the effect of impression in the perception of information), as well as the possibilities of one-time use for the general public of the results of individual search and information activities of students.

We support the conclusions of I. Kostikova (Kostikova et al., 2019) about the effectiveness of the distant form of conducting credit lessons for students in reducing students' anxiety about the level of personal pedagogical excellence. At the same time we also confirm the negative assessment of distant forms of educational activities by N. Bezliudna and N. Dudnyk (2021) since the problem is the ability to monitor the immediate emotional reactions of students.

The effectiveness of pedagogical practice, organized in a mixed mode, has been proven empirically and experimentally, as evidence of which it is possible to determine the high level of students' motivation of regarding implementation in pedagogical activities.

CONCLUSIONS

In the course of the study, the peculiarities of the organization of the pedagogical practice of future specialists in foreign philology in the conditions of a mixed form of education were determined, such as: careful selection of audio and video files for presentation and use in class; operational check and adjustment of technological elements of the remote resource: microphones, applications, etc.; organization and holding of a number of conferences with specialist mentors as an analysis of the results of credit lessons.

Noting the mentioned problems, we consider it expedient to recommend to teachers who organise pedagogical practices for students, future philologists of foreign languages, to correct practice

programs taking into account the peculiarities of its implementation in blended and distance learning. In addition, it requires attention to review the content of teaching disciplines of the psychological and pedagogical cycle and methods of teaching a foreign language taking into account the technological possibilities of using specific forms and methods of working with students in remote classes.

It is important to focus students on a clear distribution of time for the implementation of all types of speaking activities in a foreign language for students in the classroom and the reflection of these tools at specific stages of the lesson, taking into account the time of assessment and reflection.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Bakhmat L. V., & Babakina O. O. (2014). Vykorystannia platformy Moodle dlia vyvchennia anhliiskoi movy [Moodle Platform in Learning English]. *Naukovi zapysky kafedry pedahohiky*, 37, 43–50. <https://periodicals.karazin.ua/pedagogy/article/view/1974> [in Ukrainian].
- Barabash, I. (2015). Aktualni problemy praktychnoi pidhotovky maibutnikh uchyteliv-filolohiv. *Problemy pidhotovky suchasnoho vchytelia*, 12, 114–122. https://library.udpu.edu.ua/library_files/probl_sych_vchutela/2015/12_2/16.pdf [in Ukrainian].
- Bezliudna, N., & Dudnyk, N. (2021). Pidhotovka maibutnoho vchytelia pochatkovoї shkoly do prokhozhenia pedahohichnoi praktyky v umovakh dystantsiinoho navchannia [Preparation of the Future Primary School Teacher for Pedagogical Practice in the Conditions of Distance Learning]. *Zbirnyk naukovykh prats Psykholoho-pedahohichni problemy suchasnoi shkoly*, 1(5), 26–32. <http://ppsh.udpu.edu.ua/article/view/234763> [in Ukrainian].
- Chernenko, A. V. (2019). Tsyfrovı tekhnolohii u protsesi navchannia maibutnikh uchyteliv inozemnykh mov.s *Pedahohika ta psykholohiia*, 61, 193-200.

<http://journals.hnpu.edu.ua/index.php/pedagogy/article/view/3243/3301> [in Ukrainian].

- Garrison, D., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Journal of The Internet and Higher Education*, 7, 95-105. <http://dx.doi.org/10.1016/j.iheduc.2004.02.001>
- Kostikova I.I., & Bezbavna H.I. (2018). Vykorystannia internet-resursiv na zaniattiakh z inozemnoi movy. *Pedahohika ta psykholohiia*, 59, 76-83. <https://doi.org/10.5281/zenodo.1226869> [in Ukrainian].
- Kostikova, I., Miasoiedova, S., Razumenko, T., Chernenko, A., & Pochuieva, O. (2019). Teaching english speaking for FCE: using facebook as a tool of instructional practice. *Amazonia Investiga*, 8(22), 719-727. Retrieved from <https://amazoniainvestiga.info/index.php/amazonia/article/view/825>
- Koval V.O. (2013). *Teoretychni i metodychni zasady formuvannia profesiinoi kompetentnosti maibutnikh vchyteliv-filolohiv u vshchychk pedahohichnykh navchalnykh zakladakh [Theoretical and Methodical Bases of Formation of Professional Competence of Future Teachers-Philologists in Higher Pedagogical Educational Institutions]*. Uman: PP Zhovtyi O. O. [in Ukrainian].
- Kovalenko, A. (2021). Dystantsiine vyvchennia inozemnoi movy za umov pandemii: spetsyfika form i metodiv roboty [Distance Learning of a Foreign Language in Pandemic Conditions: Specifics of Forms and Methods of Work]. *Aktualni pytannia humanitarnykh nauk*, 35(3), 250-255. <https://doi.org/10.24919/2308-4863/35-3-37> [in Ukrainian].
- Prybylova, V.M. (2013). Problemy ta perevahy dystantsiinoho navchannia u vshchychk navchalnykh zakladakh Ukrainy [Problems and Advantages of Distance Learning in Higher Educational Institutions of Ukraine]. *Problemy suchasnoi osvity*, 4, 27-36. <https://periodicals.karazin.ua/issuededu/article/view/8791> [in Ukrainian].
- Rivera, J. (2019). Blended Learning-Effectiveness and Application in Teaching and Learning Foreign Languages. *Open Journal of Modern Linguistics*, 9, 129-144. <https://doi.org/10.4236/ojml.2019.92013>
- Specht, A. L. (2022). Practices and their Challenges in an English Teaching Project of a Brazilian State University during the Pandemic. *Educational Challenges*, 27(1), 23-33. <https://doi.org/10.34142/2709-7986.2022.27.1.02>
- Surhova, S.Iu., & Faichuk O.L. (2020). Osoblyvosti orhanizatsii ta provedennia psykholohopedahohichnoi praktyky maibutnikh filolohiv za umov dystantsiinoho navchannia [Features of the Organization and Conduct of Psychological and Pedagogical Practice of Future Philologists in the Conditions of Distance Learning]. *Zbirnyk naukovykh prats «Pedahohichni nauky»*, 91, 87-92. <https://doi.org/10.32999/ksu2413-1865/2020-91-12> [in Ukrainian].
- Trotsenko, O., Bilyk, O., & Pyliachyk, N. (2020). ICT as a Tool for Reducing Anxiety in Pre-Service Foreign Language Teachers' Practicum. *Information Technologies and Learning Tools*, 78(4), 193-202. <https://doi.org/10.33407/itlt.v78i4.3135>
- Vechirko, M. (2012). Pedahohichna praktyka yak odna iz umov formuvannia profesiinoho samovyznachennia maibutnoho vchytelia filolohii [Pedagogical Practice as one of

the Conditions for the Formation of the Professional Self-Determination of the Future Teacher of Philology]. *Naukovyi visnyk Pivdenoukrajinskoho natsionalnoho pedahohichnoho universytetu imeni K. D. Ushynskoho*, 3-4, 270-277. <https://dspace.pdpu.edu.ua/jspui/handle/123456789/3610> [in Ukrainian].

Yankovets A., & Yankovets O. (2020). Osoblyvosti provedennia onlain-zaniat z inozemnoi movy iz zastosuvanniam servera ZOOM v umovakh dystantsiinoho navchannia [Peculiarities of Conducting Online Classes in Foreign Languages Using Zoom Server under the Conditions of Distance Learning]. *Zbirnyk naukovykh prats Natsionalnoi akademii derzhavnoi prykordonnoi sluzhby Ukrainy. Seriya Pedahohichni nauky*, 4(23), 327-339. <https://doi.org/10.32453/pedzbirnyk.v23i4.590> [in Ukrainian].

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

**ОСОБЛИВОСТІ ОРГАНІЗАЦІЇ ПЕДАГОГІЧНОЇ ПРАКТИКИ МАЙБУТНІХ
ФАХІВЦІВ З ІНОЗЕМНОЇ ФІЛОЛОГІЇ В УМОВАХ ЗМІШАНОГО
НАВЧАННЯ**

Конкурентоздатність професійної підготовки майбутніх філологів залежить від можливостей професійної реалізації, обумовлених сформованістю конкретних компетенцій, однією з яких є компетенція педагогічної діяльності. Означений фактор спонукає до створення умов отримання студентами можливостей професійної реалізації у практичній діяльності вчителя закладу середньої (або середньої спеціальної) освіти.

Умови тривалої пандемії вимагають корекції реалізації будь-яких видів навчальної діяльності через переведення її в режим дистанційного навчання, що спричиняє необхідність особливої підготовки студентів до педагогічної діяльності в умовах змішаного та дистанційного режиму роботи освітнього закладу.

Мета статті – проаналізувати особливості організації педагогічної практики студентів іноземної філології та змішаної форми навчання.

Методологічними засадами дослідження визначаємо аналіз наукових підходів до визначення понять «педагогічна практика майбутніх філологів», «дистанційне навчання», «інформаційно-комунікативні технології (ІКТ)»; представлення результатів організації педагогічної практики студентів-філологів; визначення ефективних засобів реалізації практичної діяльності вчителя англійської мови в умовах дистанційного навчання – за результатами педагогічної практики студентів-філологів.

Результати. Педагогічна практика студентів-філологів спрямована сформулювати практичні уміння, необхідні для викладання іноземної мови, зокрема, в усіх видах мовленнєвої діяльності: говоріння, читання, письмо, аудіювання. Важливістю набуває сформованість умінь студентів урахувати особливості подання навчальної інформації та відпрацювання конкретних умінь іноземного мовлення учнів в умовах дистанційного навчання.

Аналіз опцій декількох платформ реалізації дистанційного навчання іноземної мови виявив найбільшу ефективність програми ZOOM, що підтверджено у тому числі її вибором у якості загальної платформи для навчання у базових коледжах Харківського національного університету міського господарства імені О.М. Бекетова (Україна).

За результатами проведення педагогічної практики у режимі дистанційного навчання базових коледжів визначено необхідність корекції програми практик та змісту психолого-педагогічних дисциплін та методики викладання іноземної мови з урахуванням особливостей діяльності викладача в умовах дистанційного режиму роботи з навчальною групою.

Слід зробити **ВИСНОВОК**, що важливо орієнтувати студентів на чіткий розподіл часу на виконання всіх видів мовленнєвої діяльності учнів іноземною мовою на уроці та рефлексію цих засобів на окремих етапах уроку, з урахуванням часу оцінки та рефлексії.

KEYWORDS: педагогічна практика, майбутні філологи, іноземна мова, змішане навчання, дистанційне навчання.

CITE THIS ARTICLE AS (APA style):

Rezvan, O., & Krokmal, A. (2022). Peculiarities of Pedagogical Internship Organization for Future Specialists of Foreign Philology in Blended Learning. *Educational Challenges*, 27(2), 169-184. <https://doi.org/10.34142/2709-7986.2022.27.2.12>



<https://doi.org/10.34142/2709-7986.2022.27.2.13>

RESULTS OF DIGITAL COMPETENCE DEVELOPMENT FOR PHILOLOGY STUDENTS WITHIN BLENDED LEARNING

Received: 12/07/2022

Accepted: 25/08/2022

Tetiana SOBCHENKO¹, & Viktoriia VOROZHBIT-HORBATIUK²



¹ Doctor of Science (Education), Ph.D. in Education, Associate Professor, Education and Innovative Pedagogy Department, H. S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.

✉ E-Mail: sobchenkotetyana79@gmail.com

id <http://orcid.org/0000-0002-9213-5556>



² Doctor of Science (Education), Ph.D. in Education, Full Professor, Education and Innovative Pedagogy Department, H.S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.

✉ E-Mail: gorbatykvv@ukr.net

id <http://orcid.org/0000-0002-5138-9226>

ABSTRACT

*The relevance of the problem is due to dynamic changes in digital society. The study **aims** to determine and compare the levels of digital competence development for future philologists-teachers before and after studying the module “Digital Training Tools”.*

*The research **methodology** provided consideration of the target, content and procedural aspects of digital competence development for future philologists within limits of competence, activity and technological approaches. The methods of comparative analysis of scientific publications and documents on the topic, practical survey methods using Google forms, analysis of received empirical data, generalization of scientific and pedagogical workers' experience at Ukrainian Language and Literature Faculty named after H. F. Kvitka-Osnovianenko, who ensure the implementation of educational programs in the specialty «Philology».*

The comparison is conducted with the help of pedagogical methods and appropriate extracurricular activities. It has been found out that the majority of philology students (90 students) of Bachelor Degree qualification in the

© Tetiana SOBCHENKO, & Viktoriia VOROZHBIT-HORBATIUK, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

program subject area «Philology» at the Ukrainian Language and Literature Faculty named after H. F. Kvitka-Osnovianenko and the Faculty of Foreign Philology are at the average level of digital competence development before studying the module “Digital Training Tools”.

The **results** of the study have shown that the number of students at the average level of communication and interaction in the digital society has decreased, it is completely absent at the basic level, and it has increased at the high level. The obtained and compared results after studying the module and conducting extracurricular activities are provided: the number of students at the high level of computer literacy has increased by 17% and the number of those ones at the average level has decreased by 15%. The statistics on the levels of information literacy and ability to work with digital data are given. The results indicate the effectiveness of the offered module and activities.

Conclusions. The basics for the digital competence development are defined. They are motivation and awareness of the digital competence necessity by all students in different subjects; availability of technical tools and free digital content with the native-language interface. The prospects for further research are outlined.

KEYWORDS: Digitalization, Digital Competence, Blended Learning, Teacher’s Training, Philology Students.

INTRODUCTION

In the digital age, life is permeated by digitization. Today there is a need to master all levels of digital competence. The Ukrainian digital competence experts have taken a step forward, namely, based on the European conceptual and reference model of digital competences for citizens DigComp 2.1 and recommendations from international and European institutions, developed a Digital Competence Framework for Ukrainian citizens in 2021, which is adapted to Ukraine and includes 4 dimensions, 6 areas, 30 competencies and 6 levels of digital skills (Description ..., 2021).

Another step forward was the Order of the Cabinet of Ministers of Ukraine № 167-r. “On approval of the Concept of digital competencies development and approval of the action plan for its implementation” dated March 3, 2021 (Order ..., 2021), which raises a number of issues that “need

immediate solution, including the lack of uniform requirements, approaches, indicators of digital competence, etc.” (Order, 2021). Given the action plan for the development of digital competence, the government has organized a number of activities. Thus, “the strategic goal of the Ministry of Digital Education was to teach 6 million Ukrainians digital literacy in three years” (Description ..., 2021).

This was planned to be done through the online platform “Action. Digital Education” (Online Platform, n.d.), which was created in 2020. This platform hosts more than fifty educational series for parents, teachers, civil servants, schoolchildren, coaches, active citizens, youth, etc.

Regarding the description of digital competence of a pedagogical worker, the project was developed to implement the order of the Ministry of Education and Science of Ukraine № 38 dated January 15, 2019 (Description, 2019), which covers the structure and description of levels of

digital competence in the following areas: teacher in digital society; professional development; use of digital resources; student learning and assessment; formation of digital competencies of students.

Regarding the introduction of a blended form of education in institutions of professional higher and higher education, the Ministry of Education and Science of Ukraine issued recommendations defining the benefits of blended learning: “the possibility of harmonizing the content of educational programs”. The definition of blended and distance learning is also provided. Thus, distance learning in the Law of Ukraine “On Education” is defined as “a separate form of education” (Law, 2017). Blended learning is defined as an approach, as a pedagogical or technological model, or as the methodology.

This is a direct interaction between students and teachers in the classroom using online technologies (Recommendations ..., 2020). The transition to a blended form of higher education has increased the need and importance of forming the level of digital competence of future teachers. This issue is especially acute in the training of future teachers of philology, as their training has certain specifics.

Given the urgency of the chosen problem, it should be noted that the formation of digital competence of future teachers has been the subject of research by many Ukrainian scholars. For example, N. Morse and A. Kocharian in their study considered “the interdependence of the quality of the educational environment of a modern higher education institution with the level of ICT competence of its research and teaching staff, and described the model of corporate standard ICT competence of research and teaching staff” (Morze, &

Kocharian, 2014). Subsequently, N. Morse and A. Kocharyan joined the working group to develop the project “Description of digital competence of a teacher” (Description..., 2019).

We analyzed the work of A. Tomashevskaya, O. Popova, S. Tkachev, N. Tkachova, O. Grechanyk and V. Grygorash (2020), I. Kostikova, O. Honcharova, V. Vorozhbit-Horbatiuk, N. Soloshenko-Zadniprovskaya, O. Marmaza, and Y. Lushchyk (2020). The authors prove that distance learning can provide students with additional opportunities to gain new knowledge and skills, and teachers can offer new forms and methods of learning.

I. Trubavina, S. Dotsenko, O. Naboka, M. Chaikovskiy and H. Meshko (2021) considered the formation of digital competence of teachers of humanitarian institutions of higher education in quarantine. The researchers noted that the development of digital competencies in teachers of humanities specialties depends on their age, work experience and teaching experience, self-awareness and self-motivation, moral and psychological, material incentives to master these competencies, many conditions for education at home and at work, attention to their formation at the state level (Trubavina, et. al., 2021).

For her part, H. Henseruk, identifying digital competence as one of the main components of professional competence of future teachers, analyzed European standards for defining digital competence, the European Commission’s Digital Competence Framework for Citizens (DigComp) and identified the following standards of digital competence: information management, cooperation, communication, content and knowledge, ethics and responsibility, evaluation and

problem solving, technical operation (Henseruk, 2019).

T. Sobchenko highlighted the practical aspects of “the implementation of blended learning of future teachers of philology, namely the use of information and communication and cloud technologies in the study of pedagogical disciplines by applicants for humanities in higher pedagogical education” (Sobchenko, 2020).

All the above issues relate to the disclosure of the essence of digital competence, its structure and the need to form in future teachers. The problem of developing a model for the formation of digital competence of students of philology in the context of blended learning remains relevant and unresolved, as it has not been the subject of study by scientists.

Therefore, the **aim of the article** is to identify and compare the levels of digital competence development for future teachers in Philology before and after studying the content module “Digital Training Tools”, to determine the conditions that affect the quality of digital competence development.

The methodology was also designed by conclusions from publications N. Balyk and H. Shmyher (2018), M. Kelentrić, K. Helland, and A.T. Arstorp (2018), Vorozhbit-Gorbatyuk, V.V. (2021).

METHODOLOGY

The study was conducted on the basis of H. S. Skovoroda Kharkiv National Pedagogical University during the 2020-2021 academic year. The study involved 90 students of the Ukrainian Language and Literature Faculty named after H. F. Kvitka-Osnovianenko. The selection of respondents studying at the Ukrainian Language and Literature Faculty named after H. F. Kvitka-Osnovianenko can be explained by the fact that the authors

teach directly at the Faculty. All students study in order to obtain a Bachelor's degree in specialty 035 'Philology'.

Lecturers of different departments (the Department of Information Technologies, the Department of Education and Innovative Pedagogy, the Department of the Ukrainian Language, the Department of Ukrainian Studies and Linguistic Didactics, the Professor Leonid Ushkalov Department of Ukrainian Literature and Journalism, the Department of Foreign Literature and Slavic Literature, the Department of English Philology, the Department of Practices of English Oral and Writing, the Department of English Phonetics and Grammar, the Department of Oriental Languages, the Department of German Philology, the Department of Romance Philology) took part in the survey. The purpose of the survey was to identify and compare the level of digital competence for future teachers of philology before and after studying the content module “Digital Training Tools” of the academic discipline “Pedagogy”.

As the level of digital competence of future Philology teachers determines the conditions that affect the quality of blended learning, the following research methods were used: theoretical analysis of pedagogical literature, regulations, interviews, testing, synthesis and generalization of the results of education.

The Ukrainian normative documents were considered during studying. They are: Law of Ukraine “On Higher Education” (as amended in 2017) (Law, 2014); Law of Ukraine “On the National Informatization Program” (as amended in 2020) (Law, 1998); the Concept of Development of Digital Competencies and Approval of the Action Plan for Its Implementation (Order, 2021); State Strategy for Regional Development for 2021–2027 (Resolution, 2020); Order of the Ministry of Education

and Science “On approval of the Regulations on distance learning” (as amended in 2020) (Order, 2013, April); Order of the Ministry of Education and Science “On approval of requirements for higher education and postgraduate education, scientific, educational and scientific institutions that provide educational services in the form of distance learning for training and retraining of specialists in accredited areas and specialties” (Order, 2013, October); Order of the Ministry of Education and Science of Ukraine “On approval of the Conditions of admission to higher education institutions of Ukraine in 2021” (Order ..., 2020).

The research took place in the following stages: analysis of scientific and pedagogical literature, study of normative documents; generalization and systematization of the obtained results; testing to determine the digital literacy of "Tools", and the issuance of certificates to students; study of the module "Digital Training Tools" by students of philology and conducting extracurricular activities; repeated test "Tools"; comparison of test results; identification of conditions that affect the quality of competence formation.

RESULTS

Determining the general level of digital literacy

Students have different levels of digital competence due to the age component, as well as the forced transition to distance (or blended) learning. To test this assumption, the first national test for digital literacy "Tools" was used, which was created on the basis of the European framework of digital competences for citizens DigComp 2.1. and adapted to the Ukrainian space by experts (Order, 2021). The figure was implemented "with the

support of the United States Agency for International Development (USAID), the Swiss-Ukrainian EGAP Program, funded by the Swiss Agency for Development and Cooperation and implemented by the Eastern Europe Foundation and the Innovabridge Foundation" (Online platform, n.d.).

The beta version of the Numerical Chart contains 90 questions to test basic knowledge and skills in digital literacy. All questions are classified into 6 blocks. The first block includes basics of computer literacy. The second block tests information and media literacy and ability to work with data. The third block includes the creation of digital content. The fourth block tests communication and interaction in the digital space. The fifth block includes security in the digital space. The sixth block tests learning resources through research.

We describe each of these blocks (Online platform ..., n.d.).

The first block "Fundamentals of Computer Literacy" provides a test of knowledge and skills in working with computers and mobile devices; use of basic programs and applications, as well as use of the Internet. The second block "Information literacy, ability to work with data" is aimed at testing knowledge, skills and abilities to view, search and filter content; critical evaluation of information, verification of sources and facts. The tasks of the third block "Creating digital content" allow you to diagnose knowledge, skills and abilities to create, edit and integrate digital content, compliance with copyright and licenses; primary programming skills.

The questions of the fourth block "Communication and interaction in the digital society" determine the readiness of the individual to distribute content and

exchange data using digital technologies; ability to communicate in a digital environment and knowledge of the rules of network etiquette. The fifth block "Security in the digital environment" helps to analyze the availability of knowledge on the protection of devices and secure connection to the network, security of personal data and their privacy, protection against fraud and manipulation. The sixth block "Solving problems in the digital environment and lifelong learning" aims to test knowledge, skills and abilities to search for information and services to solve technical problems; use of Internet resources for training, professional skills development and self-development.

A comprehensive approach was used during the test development. This approach identified 30 digital competencies. These competencies are

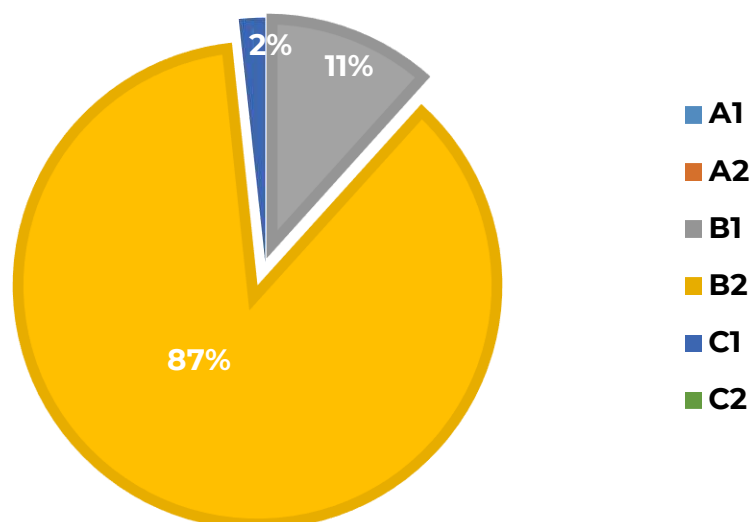
measured at three levels (basic (A), intermediate (B) and high (C)) and six sublevels, respectively (A1, A2, B1, B2, C1, C2). Passing the test "Tools" was offered to first-year students of the Ukrainian language and Literature faculty named after H. F. Kvitka-Osnovianenko and the Faculty of Foreign Philology at the first lesson of the module "Digital Training Tools".

A total of 90 students were involved in the testing. After successfully passing the test, each student received an electronic certificate. This certificate certifies the general level of digital literacy, the total number of points scored, the level and number of points in accordance with the six blocks. All certificates are stored on the virtual disk of the IT department. The test results are reproduced in Figure 1.

Figure 1

The results of the test "Tools" at the beginning of the study of the module "Digital Training Tools"

THE GENERAL LEVEL OF DIGITAL LITERACY OF STUDENTS OF PHILOLOGY



The data in the figure show that the majority of students (87%) at the beginning of the module have an average level of B2. Only 2% of students have a high level (C1). The module "Digital Training

Tools" is part of the compulsory academic discipline Pedagogy, which is compiled in accordance with the educational-professional (educational-scientific) training program of Bachelor degree, field

of knowledge 01 Education / Pedagogy, specialty 035 Philology. The total number of hours of the academic discipline Pedagogy is 7 credits (210 hours).

Description of the content module “Digital Training Tools”

The academic discipline Pedagogy is integrated and consists of five content modules, namely: “Digital Training Tools” (the Department of Information Technology), “General Fundamentals of Pedagogy”, “Theory of Education”, “Didactics” and “Fundamentals of Pedagogical Skills” (the Department of Educology and Innovative Pedagogy). The purpose of teaching the content module “Digital Training Tools” is the formation of digital competencies of future teachers in accordance with state and European requirements for IT competencies of pedagogical specialists.

The content module provides awareness of the essence of basic concepts and theories of information and communication technologies for their further use in teaching, the formation of the ability to understand the informational pedagogical reality, to teach effective pedagogical decisions by ICT, the formation of skills and organization of self-learning and ICT.

In the process of studying the module “Digital Training Tools” students will get acquainted with modern forms of e-learning, distance and blended learning, and after graduation will be ready to freely, responsibly and safely use information technology and digital devices, as well as master new ones; create informational educational products, working individually or in a team, critically evaluate information and its impact on people and society, the benefits and risks of using IT for themselves, society and environment.

Content of the module “Digital Training Tools” includes such topics as information and digital competence of the future teacher, network educational technologies, a single information educational environment, models of blended learning, educational resources for joint work on projects.

Describe each of the topics of the module. Topic 1 “Information and digital competence of the future teacher” includes the study of such concepts as “information society”, “informatization of education”, “digital literacy”, “digital competence”, acquaintance with the means of informatization of education, digital technologies in education, study of educational opportunities of information technologies, objects of computerization of educational process, and also studying of possibilities of open educational information space, electronic educational resources.

While studying topic 2 “Network educational technologies”, students get acquainted with the structure and modern servers of the Internet, search tools, learn the basics of information security, data protection in computer systems, intellectual property requirements and copyright. The purpose of topic 3 “Unified information educational environment” is to learn the concepts of “e-pedagogy”, “e-learning”, “mobile learning”, “e-textbook”, “information-educational environment”, as well as the principles of creating a single information educational environment, visualization of educational material (infographics, mental maps, word clouds, etc.).

Students create a personal learning environment, which is then tested in pedagogical practice in general secondary education. Topic 4 “Mobile, distance and blended learning” includes the study of the principles of mobile, distance and

blended learning, familiarization with the creation and requirements for distance learning courses on the Moodle platform. The organization of project activities is the task of topic 5 “Educational resources for collaborative work on projects”, which involves the creation of projects using Google services.

Most of the discipline is devoted to independent work of students. For this purpose, a distance course “Digital Training Tools” was created on the Moodle platform of H. S. Skovoroda Kharkiv National Pedagogical University (the Course “Pedagogy”, n.d.). The following topics are submitted for independent study: “Review of information technologies and their application in pedagogical activities”, “Network etiquette for discussions by means of web

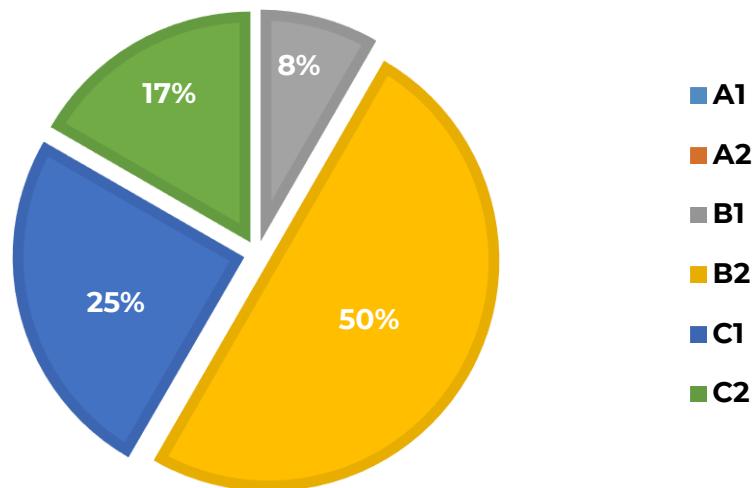
communication within the training course and / or knowledge sharing community”, “Development of educational multimedia resources (audio, video), animations, text and tabular information”, “Web 2.0 services in the organization of the educational process”, “Collaborate on Google Docs” etc. In extracurricular classes, online consultations were held for students (“Code Time”, “Science Night”), webinars on digital technologies were organized. A competition for the best e-portfolio was held. In addition, students participated in student conferences and seminars on digital competence.

After completing the study of the module “Digital Training Tools”, students again passed the test “Tools”. The results are shown in Figure 2.

Figure 2

The results of “Tools” after studying the module “Digital Training Tools”

THE GENERAL LEVEL OF DIGITAL LITERACY OF STUDENTS OF PHILOLOGY



A comparison of the data in Figures 3 and 6 shows significant positive changes in the levels of formation of students’ digital literacy. Thus, 17% of students have a high level (C2), 25% of students have C1 level. The number of students at the average level decreased: 8% at B1 level and 50% at

B2 level. The results of the comparative analysis of the levels of digital competence of students of philology before and after the study of the module “Digital Training Tools” and extracurricular activities in digital technologies are shown in Figures 2-6.

Figure 3

Comparison of the levels of students' computer literacy development before and after the study

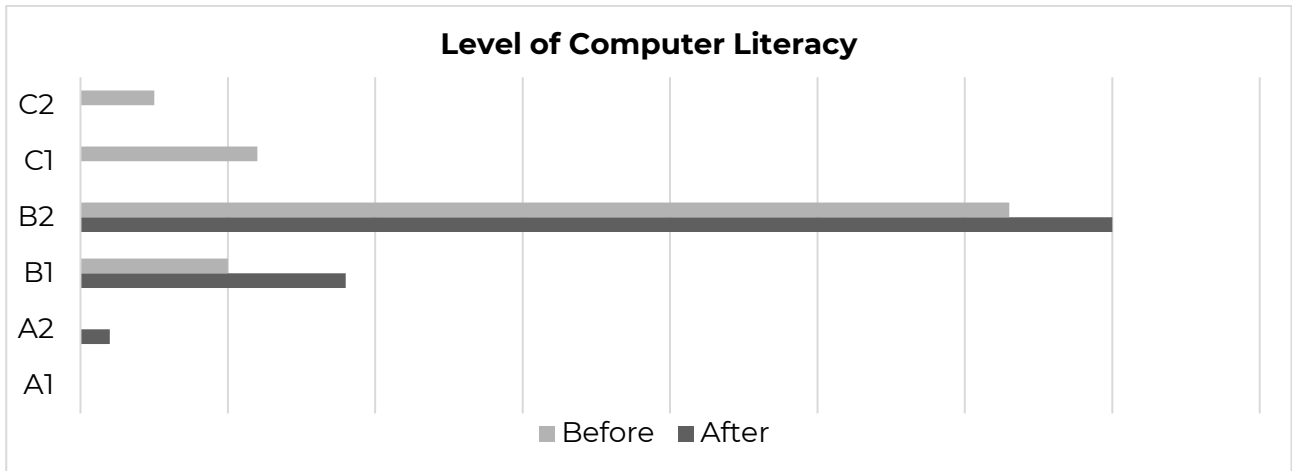


Figure 4

Comparison of the levels of creating digital content before and after the study

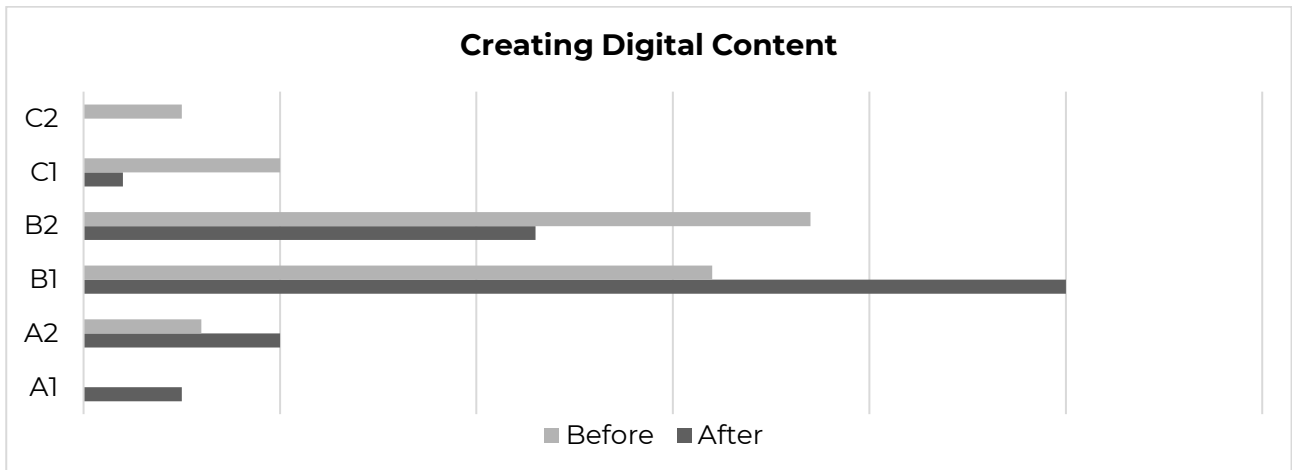


Figure 5

Comparison of the levels of students' information literacy development and ability to work with digital data before and after the study

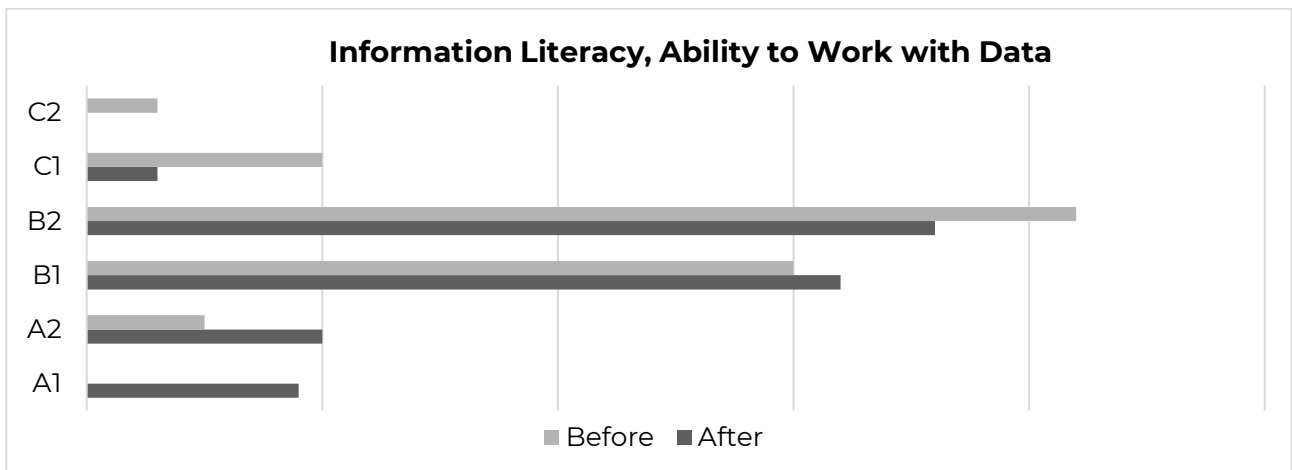
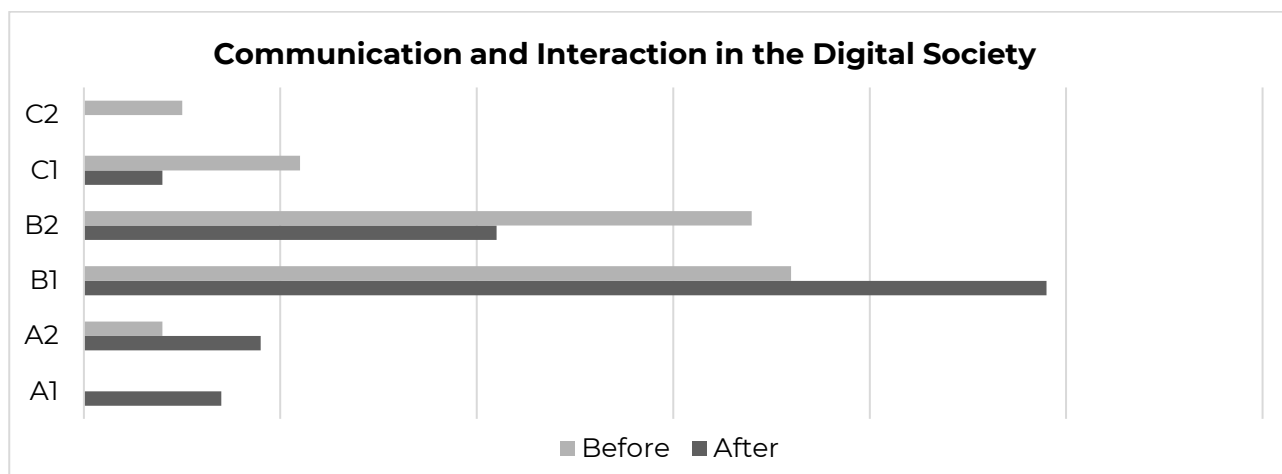


Figure 6

Comparison of the levels for students' communication and interaction in the digital society before and after the study



The comparison of the results allows us to assert the effectiveness of the module "Digital Training Tools" and the relevant extracurricular activities. Thus, the number of students with a high level of computer literacy increased by 17% (C1 and C2) and decreased by 15% at the average level (B1 and B2). Changes in the creation of digital content were as follows: +5% C2, +8% C1, -14% B2, -18% B1, -9% A1 and A2. The changes in the levels of information literacy and ability to work with data are positive: +3% C2, +7% C1, -6% B2, -2% B1, -14% A1 and A2.

The number of students at the average level in terms of communication and interaction in the digital society has decreased (-13% B1, -13% B2) and is completely absent at the basic level A1. But the number of students at a high level increased (+5% C2, +7% C1). There have been significant changes in security in the digital environment. Thus, the number of students at the basic level decreased (-7% A1, -6% A2) and increased by 6% at the high level. In terms of solving problems in the digital environment and lifelong learning, we have the following changes: -15% at the

A1 level, -7% - at the A2 level, -9% at the B1 level and +4% at the high level.

Studying made it possible to determine the conditions that affect the quality of competence formation. These competencies are consistent with the content of the national digital literacy test "Tools". The first condition is the motivation and awareness of the need for digital competence by participants in the educational process. The second condition involves the provision of personal gadgets with the necessary software and office equipment. The third is content developed and open for access, which has the Ukrainian interface.

Based on the results of the work we carried out the methodological recommendations for students of higher education (Sobchenko et al., 2021).

DISCUSSION

The problem of computer literacy development of future teachers in the process of education involves the study of international experience. It is defined as a strategic for the national educational systems development (Description of digital competence of the teacher (2019).

The results of this study emphasize the role of educational disciplines of practical direction. In this study, practical training with elements of modeling professional situations was chosen as the driving condition for effective learning. This is to some extent expands the results outlined in the authors' publications (Kostikova et al., 2020).

CONCLUSIONS

The effectiveness of the module "Digital Training Tools" and the following extracurricular activities such as online consultations, "Code Time", "Night of Science", webinars on digital technologies,

competition for best e-portfolio, conferences and seminars on digital competence is proved. The basics for the digital competence development are defined. They are motivation and awareness of the digital competence necessity by all students in different subjects; availability of technical tools and free digital content with the native-language interface. The prospect of further research is to develop a structural and functional model of the process for philology students' digital competence development in a blended learning environment.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Description of the Framework of Digital Competencies for Citizens of UKRAINE. (2021). https://thedigital.gov.ua/storage/uploads/files/news_post/2021/3/mintsifra-oprilyudnyue-ramku-tsifrovoi-kompetentnosti-dlya-gromadyan/%D0%9E%D0%A0%20%D0%A6%D0%9A.pdf [in Ukrainian].
- Order of Cabinet of Ministers of Ukraine № 167-r "On Approval of the Concept of Development of Digital Competencies in the Society of Ukraine". (2021, March). <https://zakon.rada.gov.ua/laws/show/167-2021-%D1%80#Text> [in Ukrainian].
- Online platform "Action. Digital education". (n.d.). <https://osvita.dii.gov.ua/>
- Morze, N.V., Bazeliuk, O. V., Vorotnikova, I.P., Dementiievska, N.P., Zakhar, O.H., Nanaieva, T.V., Pasichnyk, O.V., & Chernikova, L.A. (Eds.). (2019). *Opys tsyfrovoi kompetentnosti pedahohichnoho pratsivnyka* [Description of Digital Competence of the Teacher]. Kyiv. <https://elibrary.kubg.edu.ua/id/eprint/27905/1/digital%20comp%20teacher%20Morze.pdf> [in Ukrainian].
- Law of Ukraine № 2145-VIII "On Education". (2017). <https://zakon.rada.gov.ua/laws/show/2145-19#Text> [in Ukrainian].
- Recommendations for the introduction of blended learning in institutions of professional higher and higher education. (2020).

<https://mon.gov.ua/ua/osvita/visha-osvita/rekomendacij-shodo-vprovadzhennya-zmishanogo-navchannya-u-zakladah-fahovoyi-peredvishoyi-ta-vishoyi-osviti>

- Morze, N.V., & Kocharian, A.B. (2014). ICT competence standards for higher educators and quality assurance in education. *Information Technologies and Learning Tools*, 43(5), 27-39. <https://doi.org/10.33407/itlt.v43i5.1132>
- Tomashevskaya, A., Popova, O., Tkachov, S., Tkachova, N., Grechanyk O., & Grygorash V. (2020). The application of distance technology in student education. *Journal of Critical Reviews*, 7(19), 1480-1483.
- Kostikova, I., Honcharova O., Vorozhbit-Horbatiuk, V., Soloshenko-Zadniprovska, N., Marmaza. O., Lushchik, Y. (2020). The Impact of Summer Reading on Young Learners' Foreign Language Acquisition. *Journal of Educational and Social Research*, 10(2), 5-14. <https://doi.org/10.36941/jesr-2020-0022>
- Trubavina, I., Dotsenko, S., Naboka, O., Chaikovskiy, M., & Meshko, H. (2021). Developing Digital Competence of Teachers of Humanitarian Disciplines in the Conditions of COVID-19 Quarantine Measures. *Journal of Physics: Conference Series*, 1840, 1-20. <https://doi.org/10.1088/1742-6596/1840/1/012052>
- Henseruk, H.R. (2019). Digital competence as one of the professionally important competencies of future teachers. *Open Educational E-environment of Modern University*, 6, 8-16.
- Sobchenko, T.M. (2020). Mixed Learning as a Means of Activating Adaptive Processes in Higher Pedagogical Education. *Adaptive Management: Theory and Practice. Series Pedagogics*, 9(17), n.d. [https://doi.org/10.33296/2707-0255-9\(17\)-23](https://doi.org/10.33296/2707-0255-9(17)-23)
- Law of Ukraine № 1556-VII "On Higher Education" (2014). <https://zakon.rada.gov.ua/laws/show/1556-18#Text> [in Ukrainian].
- Law of Ukraine № 74/98-BP "On the National Informatization Program". (1998). <https://zakon.rada.gov.ua/laws/show/74/98-%D0%B2%D1%80#Text> [in Ukrainian].
- Resolution of the Cabinet of Ministers of Ukraine № 695 "On Statement of the Strategy of Regional Development for 2021-2027". (2020). <https://zakon.rada.gov.ua/laws/show/695-2020-%D0%BF#Text> [in Ukrainian].
- Order of the Ministry of Education and Science of Ukraine № 466 "On Approval of the Regulations on Distance Learning". (2013, April). <https://zakon.rada.gov.ua/laws/show/z0703-13#Text> [in Ukrainian].
- Order of the Ministry of Education and Science of Ukraine № 1518 "On Approval of the Requirements for higher education and postgraduate education institutions, scientific, educational and scientific institutions that provide educational services in the form of distance learning for training and retraining of specialists in accredited areas and specialties". (2013, October). <https://zakon.rada.gov.ua/laws/show/z1857-13#Text> [in Ukrainian].
- Order of the Ministry of Education and Science of Ukraine № 1274 "On Approval of the Conditions of admission to higher education institutions of Ukraine in 2021". (2020, October). <https://zakon.rada.gov.ua/laws/show/z1225-20#Text> [in Ukrainian].
- Course "Pedagogy". (n.d.). <http://lms.hnpu.edu.ua/moodle/course/view.php?id=1364>

- Balyk, N., & Shmyher, H. (2018). Methodology of Digital Competence Formation in The Context Of Digital Content Development. *Physical and Mathematical Education*, 2(16), 8-12. <https://doi.org/10.31110/2413-1571-2018-016-2-001>
- Kelentrić, M., Helland, K., & Arstorp, A.T. (2017). *Professional Digital Competence Framework for Teachers*. The Norwegian Centre for ICT in Education. ISBN 978-82-93378-51-8. https://www.udir.no/globalassets/filer/in-english/pfdk_framework_en_low2.pdf
- Sobchenko, T., Dotsenko, S., Vorozhbit-Gorbatyuk, V., & Boyarska-Khomenko A. (2021). *Tsyfrovі zastosunki ta servisy v naukovykh doslidzhenniakh: metodychni rekomendatsii dlia zdobuvachiv tretoho (osvitno-naukovoho) rivnia vyshchoi osvity* [Digital Applications and Services in Scientific Research: Methodological Recommendations for Applicants of the Third (Educational and Scientific) Level of Higher Education]. Kharkiv. <https://dspace.hnpu.edu.ua/handle/123456789/7247> [in Ukrainian].
- Vorozhbit-Gorbatyuk, V.V. (2021). *Efektivne navchannia – pedahohichni innovatsii i tradytsii* [Effective Teaching – Pedagogical Innovations and Traditions]. *Theory and Methods of Teaching and Education*, 51, 57–66. <https://doi.org/10.34142/23128046.2021.51.06> [in Ukrainian].

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

РЕЗУЛЬТАТИ РОЗВИТКУ ЦИФРОВОЇ КОМПЕТЕНТНОСТІ СТУДЕНТІВ-ФІЛОЛОГІВ У МЕЖАХ ЗМІШАНОГО НАВЧАННЯ

Актуальність проблеми зумовлена динамічними змінами цифрового суспільства. **Метою** дослідження є визначення та порівняння рівнів розвитку цифрової компетентності майбутніх учителів-філологів до та після вивчення модуля «Засоби цифрового навчання».

Методологія дослідження передбачала розгляд цільових, змістових та процесуальних аспектів формування цифрової компетентності майбутніх філологів у межах компетентнісного, діяльнісного та технологічного підходів. Розроблено методи порівняльного аналізу наукових публікацій і документів з теми, методи практичного опитування за допомогою гугл-форми, аналізу отриманих емпіричних даних, узагальнення досвіду роботи науково-педагогічних працівників, які забезпечують реалізацію освітніх програм за спеціальністю «Філологія», що використовується факультетом української мови та літератури імені Г. Ф. Квітки-Основ'яненка.

Порівняння проводилося за допомогою педагогічних прийомів та відповідної позааудиторної роботи. З'ясовано, що більшість студентів-філологів (90 осіб) освітньо-кваліфікаційного рівня «бакалавр», за освітніми програми спрямування «Філологія» українського мовно-літературного факультету імені Г. Ф. Квітки-Основ'яненка та факультету іноземної філології знаходяться на середньому рівні розвитку цифрової компетенції перед вивченням модуля «Засоби цифрового навчання».

Результати дослідження показали, що кількість студентів на середньому рівні комунікації і взаємодії в цифровому суспільстві зменшилась, на

базовому рівні вона повністю відсутня, а на високому – зросла. Наведено отримані та порівняні результати після вивчення модуля та проведення позааудиторних заходів: на 17% зросла кількість студентів з високим рівнем володіння комп'ютерною грамотністю, на 15% – зменшилася на середньому рівні. Наведено дані про рівні інформаційної грамотності та вміння працювати з цифровими даними. Результати свідчать про ефективність пропонованого модуля та проведених заходів.

Висновки. Визначено засади розвитку цифрової компетенції. Це мотивація та усвідомлення значущості цифрової компетентності всіма студентами з різних предметів; наявність технічних засобів і безкоштовного цифрового контенту з інтерфейсом рідною мовою. Окреслено перспективи подальших досліджень.

КЛЮЧОВІ СЛОВА: цифровізація, цифрова компетентність, змішане навчання, підготовка викладачів, студенти-філологи.

CITE THIS ARTICLE AS (APA style):

Sobchenko, T., & Vorozhbit-Horbatiuk, V. (2022). Results of Digital Competence Development for Philology Students within Blended Learning. *Educational Challenges*, 27(2), 185-198. <https://doi.org/10.34142/2709-7986.2022.27.2.13>



<https://doi.org/10.34142/2709-7986.2022.27.2.14>

JUSTIFICATION OF THE EDUCATORS' NEW PROFESSIONAL FUNCTIONS UNDER THE CONDITIONS OF MARTIAL LAW

Received: 15/08/2022

Accepted: 15/09/2022

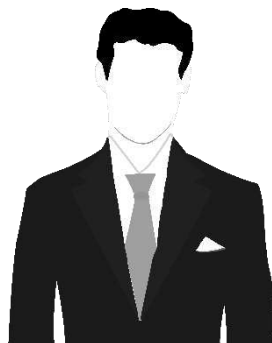
**Iryna TRUBAVINA¹, Oleksandr CHEREDNYCHENKO²,
Nadiia OLIINYK³, & Kirill NEDRIA⁴**



¹ Doctor of Sciences (Pedagogy), Ph.D. in Pedagogy, Full Professor, Associate Professor, Ternopil Regional Communal Institute of Postgraduate Pedagogical Education, V. Hromnytsky Str., 1, Ternopil, Ukraine.

✉ **E-Mail:** trubavina@gmail.com

 <https://orcid.org/0000-0003-1057-430X>



² Ph.D. in Economics, Professor, Associate Professor, Yaroslav Mudryi National Law University, Pushkinska Str. 77, Kharkiv, Ukraine.

✉ **E-Mail:** Ch.a.u@ukr.net

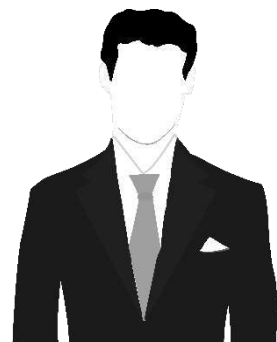
 <https://orcid.org/0000-0002-5304-5662>



³ Ph.D. in Pedagogy, Teacher, I. Horbachevsky Ternopil National Medical University of Ministry of Health of Ukraine, Maidan Voli, 1, Ternopil, Ukraine.

✉ **E-Mail:** oliinyk@tdmu.edu.ua

 <https://orcid.org/0000-0001-7770-7176>



⁴ Ph.D. in History, Associate Professor, Dnipropetrovsk State University of Internal Affairs, Haharina Str., 26, Dnipro, Ukraine.

✉ **E-Mail:** k.nedrya@gmail.com

 <https://orcid.org/0000-0002-9370-1900>

© Iryna TRUBAVINA, Oleksandr CHEREDNYCHENKO, Nadiia OLIINYK, & Kirill NEDRIA, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

ABSTRACT

The article is devoted to actual problem of today's pedagogical theory: the new functions of educators in the conditions of martial law. Based on a review of foreign and native sources, the generalization of experience in Ukraine and beyond, the authors achieve the purpose. The **purpose** is to define the new functions of educators in the conditions of martial law and to fill in the existing ones with new content. The research is based on competence, activity, environmental, socio-pedagogical, safety approaches.

Methodology. The research is based on competence, activity, environmental, socio-pedagogical, safety scientific approaches. Research methods are: theoretical analysis of sources, generalization, observation, conversations, establishment of cause and effect relationships. The materials of the research were domestic and foreign works on education methodology, safety in education, our experience of teaching at teacher training programs.

Results. We observe an increase in the functions of educators under martial law. It is logical to add to the traditional functions of the school principal: security function, organization of social support and assistance; social adaptation; personnel management and implementation of a sustainable personnel policy in institution of general secondary education; preventive function, the function of cohesion and unity of the school team and the population in the community; national-patriotic; organizational; financial management in institution of general secondary education; informative. Teachers in the conditions of martial law were also faced with the need to perform the following new functions: socio-pedagogical (helping children to solve problems of socialization in conditions of martial law, family distance); social adaptation and integration of families with children in the conditions of the host community; social prevention of negative phenomena in the educational environment; information about resources to help in the community; social support and assistance to families with children in the conditions of an educational institution – a temporary shelter for families; pre-medical care; promotion of national security through increased attention to national-patriotic education.

Conclusions. Our research shows that all teaching staff of educational institutions and their principals in the conditions of martial law begins to perform additional functions and new tasks due to the peculiarities of the martial law in education and new threats to children and all other participants of the educational process, requirements to ensure national security. It requires updating the list and expanding the content of educators' functions under martial law. That is why these questions should be included in the professional standards of the principal and the teacher of the institution of general secondary education, in educational programs of various levels, which will be the prospects of our further research.

KEYWORDS: Martial Law, Professional Standards, Functions, Security, Right to Education, National Education.

INTRODUCTION

Today, teachers and principals of educational institutions work in conditions of martial law, mass displacement of adults and children, including those who went abroad, while there are no safe places in Ukraine. In the modern professional standards of secondary school teachers and principals, there are no issues of working in conditions of martial law, accordingly, all teachers and principals of secondary schools are prepared to work in peaceful conditions, (Prykhodko et al., 2019; Prykhodko et al., 2020). This requires clarifying the professional functions of educators in accordance with the times, adding to the standards.

Existing studies reveal the issue of teacher training for work in the New Ukrainian School (Prokopenko, 2020), related to the implementation of the competency approach in the higher education system of Ukraine (Trubavina, & Zolotukhina, 2019). These research papers emphasize the work of a teacher and educational manager according to professional standards for peace time. There are no Ukrainian studies and recommendations regarding the safety of the educational process in the conditions of martial law. Although there are some foreign studies of the problem of education in conflict conditions (Kryminalnyy kodeks Ukrayiny, 2001; The World Bank Group n.d.; Global Education Monitoring ..., n.d.; Levchenko et al., 2015; UNICEF. Regional Office ..., 2007; Helping Hands at ..., n.d.).

But they do not apply to education in conditions of large-scale aggression. Until that time, educators studied labor and civil protection in peace time conditions. Today, education has different realities, the war is a different weapon, education continues in the conditions of hostilities, some children study in Ukraine, some – in

remotely intemporarily occupied territories, some – abroad. And this is in the same class.

Teachers are also in different parts of the country and abroad. There are many questions regarding the organization of education, training and upbringing, they are extremely important for the construction of Ukraine and its future. The few existing studies are devoted to socio-pedagogical and psychological work with families with children in conditions of military conflict (Global Education Monitoring, n.d.; Levchenko et al., 2015; UNICEF. Regional Office ..., 2007), but not in conditions where 8.8 million people are internally displaced and schools have become shelters for families with children, social assistance centers in communities.

Today, under martial law, education issues are subordinated to military-civilian administrations for reasons of safety for all participants in the educational process. This imposes new professional duties on all participants of the educational process. How to implement them and what exactly needs to be done, educators today know a little. This is evidenced by our own lectures and communication with educators at teacher training courses.

At the same time, teachers are responsible for the life and health of children. The Criminal Code of Ukraine (Kryminalnyy kodeks Ukrayiny, 2001) contains Article 137 “Improper fulfillment of duties regarding the protection of children's life and health”. In accordance with paragraph 1 of the specified article “Failure or improper performance of professional or official duties to protect the life and health of minors as a result of negligent or dishonest treatment of them, if this caused significant damage to the health of the victim, is punishable by a fine of up to fifty non-taxable minimum incomes of citizens or public works for a period of up

to two hundred and forty hours, or deprivation of the right to hold certain positions or engage in certain activities for a period of up to three years”.

Paragraph 2 of this article tells that “...the same actions, if they caused the death of a minor or other serious consequences, are punishable by restriction of liberty for a term of up to four years or deprivation of liberty for a term of up to three years, with deprivation of the right to hold certain positions or engage in certain activities for a term of up to three years or less”.

Thus, we urgently need to train the administration of educational institutions and teaching staff to create conditions for the safety of children in education in the conditions of martial law today. Also, in order to improve the situation of people, pedagogical workers provide information about resources and opportunities for help in the community, which people can use to improve their situation. In general, the range of functions of pedagogical workers in war conditions is much wider, which will be discussed further in the article.

Educators have new functions, and they need to be defined and described, since the professional standards of teachers and heads of educational institutions do not take war into account, relate only to peacetime, and thereby make it impossible to prepare these specialists for work in wartime conditions. There have been no studies on these issues in the theory of pedagogy yet.

Therefore, **the purpose** of the article is to determine the new functions of educators in the conditions of martial law and to fill them with content.

METHODOLOGY

The research is based on competence, activity, environmental, socio-

pedagogical, safety scientific approaches. Research methods are: theoretical analysis of sources, generalization, observation, conversations, establishment of cause and effect relationships. The materials of the research were domestic and foreign works on education methodology, safety in education, our experience of teaching at teacher training programs.

RESULTS

According to the Law of Ukraine “On the Legal Regime of Wartime” (Zakon Ukrainy «Pro pravovyy ... , 2015), martial law is a special legal regime that is introduced in Ukraine or in some of its localities in the event of armed aggression or threat of attack, danger to the state independence of Ukraine, its territorial integrity and provides for the provision to the relevant state authorities, military command and local self-government bodies, the powers necessary to avert the threat and ensure national security, as well as the temporary, threat-induced, restriction of the constitutional rights and freedoms of a person and citizen, the rights and legal interests of legal entities, with an indication of the period of the restrictions' validity.

There are the following measures of the legal regime of martial law may be applied in the country and regions:

1. To introduce labor obligation for able-bodied persons who are not involved in work in the defense sphere and the sphere of ensuring the vital activities of the population and who are not reserved for enterprises, institutions and organizations for the period of mobilization and wartime.
2. Use the capacities and labor resources of enterprises, institutions and organizations of all forms of ownership for the needs of defense, change their mode of operation, carry out other changes in production activity, as well as working

conditions in accordance with labor legislation.

3. To seize property necessary for defense needs for temporary use; including transport, equipment, etc.

4. To establish protection of important objects of the national economy of Ukraine, which ensure the population's vital activities.

5. To introduce a curfew.

6. Establish a special entry and exit regime, limit the freedom of movement of citizens, foreigners and stateless persons, as well as the movement of vehicles.

7. To check citizens' documents, and if necessary, conduct an inspection of things, vehicles, luggage and cargo, office premises and citizens' homes, with the exception of the restrictions established by the Constitution of Ukraine.

8. In accordance with the procedure established by the Constitution and laws of Ukraine, raise the issue of banning the activity of political parties, public organizations, if it threatens the sovereignty, national security of Ukraine, its state independence and territorial integrity, and the lives of citizens.

9. To monitor the work of communication enterprises, printing enterprises, publishing houses, television and radio organizations, theatre, concert and entertainment and other enterprises, institutions and cultural organizations.

10. In case of violation of the requirements or non-fulfillment of measures of the legal regime of martial law, seize radio equipment, television, video and audio equipment, computers, as well as, if necessary, other technical means of communication from enterprises, institutions and organizations of all forms

of ownership, and technical means of communication.

11. To prohibit trade in weapons, powerful chemical and poisonous substances, as well as alcoholic beverages and substances produced on an alcohol basis.

12. To confiscate fire arms and ammunition, melee weapons from citizens, as well as educational and military equipment, explosives, radio active substances and materials, potent chemical and poisonous substances from enterprises, institutions and organizations.

13. To prohibit conscripts and conscripts from changing their place of residence without the knowledge of the military command.

14. To establish for individuals and legal entities the military housing obligation for the quartering of military personnel and the accommodation of military units, units and institutions.

15. To establish the procedure for the use of storage facilities, buildings and other objects for the protection of the population, as well as for meeting defense needs.

16. To carry out the evacuation of the population from places and areas that are dangerous for habitation, as well as enterprises, institutions, organizations and material values that have important state, economic and cultural significance.

17. To introduce, if necessary, a standardized provision of the population with basic food and non-food products, medicines.

18. To remove from the positions of heads of state enterprises, institutions and organizations for improper performance of their duties, appoint acting heads of mentioned enterprises, institutions and organizations.

19. For cibly alienate or seize property from legal entities and individuals for defense purposes.

Thus, in education under martial law, there is also a certain limitation of the rights of participants in the educational process, which is due to the threat to their life and health from the aggressor, as well as the need to comply with certain restrictions and requirements of legislative acts in the interests of ensuring national security. Consequently, educators begin to perform functions related to the safety of all participants of the educational process and in the interests of ensuring national security, which was not the case before.

Children have the right to safe conditions in education. Thus, in the Law "On Education" (Zakon Ukrayiny «Pro ... , 2017) in Article 53 it is stated that "Educators have the right to: freedom of creative, sports, recreational, cultural, educational, scientific and scientific and technical activities, etc.; safe and harmless conditions of study, maintenance and work; protection during the educational process from humiliation of honor and dignity, any form of violence and exploitation, discrimination on any grounds, propaganda and agitation that harm the health of the student of education".

Clause 3 of this Law states that "Educators are obliged to: respect the dignity, rights, freedoms and legitimate interests of all participants in the educational process, adhere to ethical standards; to treat one's own health, the health of others, and the environment responsibly and carefully". But the Law also does not directly prescribe the rights of the child in the conditions of martial law, including the right to physical security. This is the responsibility of educators today, who have to create a safe educational

environment, both digital and real, for the continuation of children's education.

The question remains undefined: how can today's pedagogical workers fulfill the task of education, children safety and development under fire, in conditions of displacement, occupation, evacuation, stress, psychological trauma, loss? For this, they need training in new functions and the definition of these functions, their differentiation between pedagogical workers and education principals, the distribution of responsibilities within the educational institution, methodical and psychological support, and even constant support and supervision from the education departments and regional institutes of professional development, improvement of the professional standards of the institution of general secondary education principal and / or teacher.

It should be noted that according to the current legislation on education, teaching staff are obliged to "form in students a desire for mutual understanding, peace, and harmony between all peoples, ethnic, national, religious groups; to protect students during the educational process from any form of physical and mental violence, humiliation of honor and dignity, discrimination on any grounds, propaganda and agitation that harm the health of the student, to prevent their use by them and other persons on the territory educational institutions of alcoholic beverages, narcotics, and other harmful habits" (Zakon Ukrayiny «Pro ... , 1992).

That is, we are talking about the prevention of the culture of war, negative habits and phenomena in the educational environment, the formation of a culture of peace in conditions of war, universal human values and respect for human rights. The School Safety Declaration (Ministry of Education ..., 2021) draws

attention to this, which educators, unfortunately, do not know and do not implement in the education system yet. It has only been implemented experimentally since 2019 in some schools of Ukraine.

Meanwhile, programs on the discipline “Labor Protection of Pedagogical Workers” of institutions of higher pedagogical education of leading institutions that prepare teachers for work have not yet introduced new topics related to the war into the syllabi. Educational programs for the training of education managers in Kharkiv and other cities also do not yet have educational disciplines related to martial law. While, for example, Ternopil Regional Communal Institute of Postgraduate Pedagogical Education has many topics on the implementation of wartime education to improve the qualifications of teachers, it is not a matter of child safety and social support for families.

It should be noted that today the Law of Ukraine “On Education” is supplemented by Article 57-1, which establishes state guarantees for participants in the educational process in conditions of martial law, state of emergency or state of emergency (special period). The special period is the period that begins from the moment of the announcement of the decision on mobilization (except for the targeted one) or its delivery to the executors regarding covert mobilization or from the moment of the introduction of martial law in Ukraine or in some of its localities and covers the time of mobilization, wartime and partially the reconstruction period after the end of hostilities (Zakon Ukrayiny «Pro oboronu ..., 1991).

Education seekers, employees of educational institutions, educational institutions, scientific institutions,

regardless of their place of residence/stay during a special period, are guaranteed: the organization of the educational process in a remote form or any other form that is the safest; preservation of the place of work, average earnings, payment of stipend and other payments provided for by law; place of residence (boarding house, dormitory, etc.) and provision of food (if necessary). This norm applies, in particular, to those who were forced to change their place of residence/residence, left their workplace, place of study (Zakon Ukrayiny «Pro ..., 2017).

Decisions regarding the provision of appropriate guarantees, the creation of a safe educational environment, the organization of education and the implementation of the educational process in a special period are taken within the limits of their competence: executive power bodies, military command bodies, military, military-civilian administrations and local self-government bodies, their representatives, officials persons (managers, heads, chiefs), management bodies (structural divisions) in the field of education; educational institutions, educational institutions, scientific institutions, their founders; public associations, charitable organizations and individuals who carry out charitable (volunteer) activities (Zakon Ukrayiny «Pro ..., 2017).

The Ministry of Education and Science of Ukraine in a special period provides regulatory and legal support for the functioning of the education and science system; issues orders on the creation of a safe educational environment, the organization of education, the educational process, and other issues in the field of education and science that are not regulated by law in the conditions of a special period. Such orders are valid only during the validity of a special period, are

not regulatory acts and are subject to state registration only if they concern the rights, freedoms, legal interests and obligations of citizens and legal entities (Zakon Ukrayiny «Pro ..., 2017).

The State Service for the Quality of Education in accordance with its powers and within the limits of its competence: analyzes the activities of local executive bodies, local self-government bodies, and their structural subdivisions on education issues; submits to the Minister of Education and Science proposals for ensuring the formation of state policy in the field of education (Zakon Ukrayiny «Pro ..., 2017).

Thus, the flexibility of work in educational institutions and opportunities to realize the child's right to education, and pedagogical workers' right to work, are today enshrined in law. The safety function is directly prescribed and applies to all teaching staff. It should be noted that security is a state in which nothing and no one threatens anyone, for any reason; at the same time, it is the activity of people, society, the state, and the world community of peoples to identify, prevent, weaken, eliminate, and avert a threat capable of losing them, destroying material and spiritual values, and hindering their progressive development. The availability of security is a necessary condition and one of the main reasons for the viability of a person, society, state and the world community.

In education, no one cancels child-centrism, adopted as a reference point of education in Ukraine, in the conditions of war, which today requires a special attention to the safety of children, realization of their right to education, creation of conditions for comprehensive upbringing, education, socialization and development. People-centeredness, which is researched and promoted by

Vasyl Kremen, the President of National Academy of Pedagogical Sciences of Ukraine, means paying attention to other participants in the educational process, who are all equal under the legislation on education.

We emphasize the safety of pedagogical and scientific-pedagogical workers, and parents of children. The well-being of children and young people depends on their state of health (physical, social and mental well-being). In a war situation, when the majority of the population is confused and does not know how to act regarding their own safety, the leadership role of teachers increases.

In particular, in order to ensure the strategic management of the development of an institution of general secondary education in the conditions of war, it can be said that the school director must have such professional competences as: the ability to be guided in managerial activities by regulatory and legal documents in the field of education; the ability to design and develop documents related to the management of an educational institution, which even the Ministry of Education and Science develops for the period while martial law is in effect.

That is, awareness of the dangers in the community and the region in terms of safety affects the strategic management of Ministry of Education and Science, which requires knowledge of the School Safety Declaration (Ministry of Education ..., 2021). There is an opportunity to teach and learn in war conditions today even from abroad. So, we see an increase in the professional functions (security, social support and assistance, information, etc.) of pedagogical workers and new working conditions in war time.

It should be noted that martial law is also aimed at national security, not only at the safety of participants in the educational process. And today, educators do not know this issue at all, as well as their role in contributing to national security. National security functions through a system of various relations between a person and society, between a citizen and the state, between society and the state, between different states.

National security is the state of internal and interstate relations, which determines the effectiveness of the system of state, legal and social guarantees of human and citizen rights and freedoms, basic values and interests of society and the sovereign state against internal and external threats. Including guarantees of the realization of the right to education for children in Ukraine under martial law and abroad.

The main objects of national security are: a person and a citizen – their constitutional rights and freedoms; society – its spiritual, moral and ethical, cultural, historical, intellectual and material values, informational and environmental environment and natural resources; the state – its constitutional order, sovereignty, territorial integrity and inviolability; the nation and other national communities, its identity and factors of self-development; social communities, their functional roles and development factors; nature, the natural environment – its immediate condition.

Thus, ensuring the education of children, their safety, national-patriotic upbringing in the spirit of victory and restoration, development of Ukraine, the return of children and their mothers from abroad is a contribution to national security by the forces of pedagogical workers in the conditions of martial law.

Today, the ideas of Ukrainian centrism and national unity, national dignity, and a clear awareness of the historical role and purpose of the nation are becoming more relevant in Ukraine. The geopolitical position of Ukraine on the border of two great civilization spaces - European and Eurasian was and is one of the determining factors of its historical and political fate. Geographically, Ukraine has always been and remains a Central European state.

Historically and politically, for a long period, most of the territory of Ukraine was under the influence of the Euro-Asian socio-cultural tradition, being part of the Russian, then the Soviet Empire. The national mentality turned out to be split, accordingly, there were no unified geopolitical priorities, national interests, and unified national strategy. All this led to the current difficulties of Ukraine becoming a Eurasian state.

However, a clear definition of geopolitical priorities, consolidation of the main national interests in the mass consciousness is one of the most important prerequisites for the stable development of every modern state. Today, our state and the nation of Ukrainians have decided on them, the political and legal prerequisites for the functioning of education during the period of martial law were quickly created, they affected the professional functions of all educators, national consciousness and, accordingly, should affect the national upbringing of children and youth.

This is one of the aspects of updating the content of the functions of educators in wartime - an emphasis on national and patriotic education. The nation is not a fleeting value, but a modern form of self-organization of society, thanks to which the universal human rights of various

ethnic, cultural minorities, and economic communities acquire a concrete meaning.

Combining the ethnic identity and the economic universality of social life, the nation does not allow the former to turn into an archaic community of the fundamentalist or racially – Nazi type, and the latter into communism or cosmopolitan nationalism, which destroys any cultural identity. Therefore, it is the national-patriotic upbringing in the education system that is today a factor in the movement towards victory and restoration of human rights in full.

This is evidenced by our research on the social well-being of students of displaced higher education institutions (on the example of LNU named after Taras Shevchenko), which proves that even if the basic needs of students from among internally displaced persons are slightly met, with the available social support from higher education institutions, national education itself is the factor that most contributes to the formation of a sense of social well-being among students. Students feel that they are among their own, they have all kinds of support and this is greater than material goods (Trubavina, et al. 2021). Therefore, the function of social support for internally displaced persons and the function of national-patriotic education are interrelated for educators in the conditions of martial law.

It should be noted that today, in addition to the mass media, the leadership role in the community, microenvironment, should be played by the heads of educational institutions and pedagogical workers who have constant connections with the parents of children due to the performance of their duties as class teachers and daily communication with children. Enlightenment, clarification of rights and opportunities, information

about resources, community cohesion, patriotic upbringing of children in new conditions, social adaptation to new living conditions and the region (for internally displaced persons) – new functions of teachers and heads of educational institutions in wartime conditions.

Many of the population received psychological injuries, their occupiers were "released" from their homes, jobs, and property, many schools were destroyed, children became orphans, injured, which became a huge stress and the cause of other psychological injuries for adults and children. This increases the role of pedagogical workers in the organization of assistance to citizens. So, in addition to security, there is a question about the organization of assistance and social support. That is, the leadership function has an update in terms of content.

The professional standard of the director of a general secondary education institution mentions the need for the ability to manage changes, make and make decisions based on the assessment of existing alternatives and risks. They are responsible for the lives of children and teaching staff. Therefore, competence in decision-making under martial law is required. If the decision-making methods are well-known (collective and individual, mathematical, etc.), then the criteria for their decision-making have peculiarities today. The most important criterion today is the life, health and safety of children and other participants in the educational process. Then – the right to education.

The function of ensuring the quality of the educational process in conditions of war is also not covered in this standard. To some extent, this issue is resolved by the Law of Ukraine "On Education" (Zakon Ukrayiny «Pro ..., 2017), Article 57-1. But how to do it in detail is not written anywhere in the

regulatory documents. To ensure network and partnership interaction as a function of a school director, competencies that can be useful in war conditions are needed, namely: leadership and emotional-ethical. The work of the teaching staff in war time and the situation, psychological climate in the educational institution depend on them. The school director is an example for teachers.

Therefore, how to behave, what example to set with one's behavior – today's issues are countering the enemy, ensuring victory, and equipping the team for work in new difficult conditions. The question arises about the rules of conduct of the administration and teaching staff of the institution of general secondary education in the conditions of war. Like a code of ethics or standards and norms of behavior. Today, individual schools have adopted their own codes of ethics for teachers, class leaders, and teaching staff.

But they do not take into account the conditions of war. As a rule, these codes include a list of values, norms of behavior, requirements for personal and professional qualities of a Ukrainian teacher, peculiarities of his behavior in various professional situations. Their focus on the patriotism of the teacher in all these documents and on child-centrism, interaction with parents in the interests of the child is valuable.

It should be noted that the humanism of the teacher in the war is the main principle of his activity. Humanism traditionally means in an educational institution: attention to the needs of the child and the priority of his interests, respect for the child in combination with demands on him, the more demands, the more we respect the child – according to A.S. Makarenko.

But the demands placed on children in the conditions of psychological trauma raise questions - how to fulfill the standard of education, how to organize training, communicate with children when she is in or out of shelling, is silent or cries because the child has seen death and destruction. Questions arise about teachers' attention to the child's inner world, an individual approach to it, empathy and compassion in combination with the creation of conditions for education and ensuring the quality of education.

Therefore, it is necessary to have knowledge for the school director and recommendations for teachers in the educational institution regarding the behavior and communication with children and their parents, the closest social environment regarding the establishment of trusting and humane relations with them as a condition for realizing the right to education and development of a child in war.

The function of the school director to ensure a safe and healthy educational environment is connected with the need for the school director to possess health-preserving and inclusive competencies. They include functions that were not the subject of attention before - the security of the digital educational environment, the organization of pre-medical care, prevention of physical, property and moral harm to the participants of the educational process, etc.

Also, safety involves the creation of a safe educational environment in an educational institution, the formation of a safety culture among all participants in the educational process, the provision of safety design in the institution, and the identification of real dangers in a specific community and institution. The special needs of children are mentioned in the inclusive competence, but traditionally

they are considered only as the needs of children with disabilities and disabilities. While today, children of internally displaced persons, children in combat zones, children of soldiers, etc., have special needs. And the issues of their integration and social adaptation to the conditions of martial law and in the community (for internally displaced persons) are new for the teacher.

Separately, it should be said about personnel management in education. Today, the director of the school, in connection with the acquisition of autonomy of institution of general secondary education, has the right to recruit both technical staff and teaching staff. But there are no criteria for selecting people. Wartime imposes the issue of decision-making on dismissal for collaborationism or suspension of labor relations. This is a matter of personnel security and national security today, given the role of educators in the information war. There is also a question about the selection of personnel, their career growth as a work system. This requires personnel management in the Armed Forces as a separate function in wartime and peacetime, taking into account the specifics of each.

There are separate financial and economic issues such as the preservation of school property, the educational base and their multiplication and development, the performance of various outsourcing works for internally displaced persons (school security, repairs, Internet, etc.). We also refer here to the issues of organizing children's meals, pre-medical care, etc. What requires the financial competence of the head of institution of general secondary education.

Based on what has been said, we can talk about the increase in the functions of educators in the conditions of martial law

as a result of the increase in workload, the expansion of the scope of work and its directions, the appearance of new objects of work. Therefore, it is logical to add to the traditional functions of the school director as an education manager today in the conditions of martial law:

- Safety function as the creation of conditions to preserve the life and health of all participants in the educational process;
- Organization of social support and assistance to families with children in the community to meet their basic needs;
- Social adaptation of internally displaced persons to the host community, all to education in martial law conditions;
- Personnel management and implementation of a sustainable personnel policy in internally displaced persons;
- Preventive function as prevention and limitation of conditions and factors that prevent the realization of children's rights, their freedoms and legitimate interests; prevention of bullying, cruelty, violence, culture and philosophy of war,
- The function of rallying and unifying the school team and the population in the community for the sake of victory, helping the front, overcoming possible adaptation disorders in internally displaced persons, socialization of children and families in the host community, enlightenment about values and customs in the host community;
- National-patriotic as an example of own leadership competence;
- Organizational regarding the team's work in new conditions, pre-medical care, safety of the digital educational environment;

- Financial management in institution of general secondary education;
- Informational as learning models of behavior in war conditions that save lives and contribute to victory; informing about possible community services and resources to help internally displaced persons and families with children, humanitarian aid, etc.

Teachers in the conditions of martial law were also faced with the need to perform the following new functions:

- Social-pedagogical (helping children to solve socialization problems in the conditions of martial law, family distance);
- Social adaptation and integration of families with children in the host community;
- Social prevention of negative phenomena in the educational environment;
- Information about resources for help in the community;
- Social support and assistance to families with children in the conditions of an educational institution - a temporary shelter for families;
- Pre-medical care;
- Promotion of national security through increased attention to national and patriotic education.

As stated in the manual on socio-pedagogical and psychological assistance to families with children in conditions of military conflict (Levchenko et al, 2015), employees of the psychological service of educational institutions should pay attention to the following when organizing activities:

- creation of a favorable social and psychological climate in the educational institution and optimization of the content

and forms of psychological education of pedagogical workers and parents;

- prevention of secondary traumatization of the participants of the educational process by their actions or inaction and, if necessary, redirecting children, parents and teachers to other specialists (psychotherapist, neurologist and others);
- application of intersectoral interaction and a multidisciplinary approach to solving problems that arise (if necessary, contact health care facilities and institutions, units of the Emergency Service, etc. with a proposal for cooperation and coordination in the provision of psychological assistance to those who need it);
- involvement of highly qualified specialists, practical psychologists, social educators, psychotherapists, psychological-medical-pedagogical commission consultants in the provision of psychological assistance;
- organization for those who work directly with the victims: a) psychological and professional supervision; b) methodical support in the form of booklets, methodical developments, conducting educational seminars and seminars on exchange of experience; c) material assistance in the form of necessary accessories and office equipment;
- making corrections to the work plans of all employees of the psychological service who are involved in providing assistance to the victims.

DISCUSSION

The issue of safety in education today is important in the context of sustainable development of society, continuity of education, ensuring the realization of the right to education, as foreign sources say

(The World Bank Group, n.d; Global Education Monitoring ..., n.d.; UNICEF. Regional Office ..., 2007; Conflict Sensitivity and ..., 2016). But the issue of children's education in the conditions of large-scale aggression was not the subject of research and generalization of experience, it did not exist at all.

Therefore, it was the generalization of the experience of the problem in Ukraine through the observation of the work of the institution of general secondary education that made it possible to highlight the new functions of the principal and the teacher of general secondary education institution in the conditions of martial law in a large-scale war, rather than a local conflict. This is a unique first experience in the world.

But at the same time, we took into account such experience as the one that became the basis for a general understanding of the need for education in war. Therefore, education in the conditions of martial law in Ukraine takes this experience into account and develops it, which requires a review of professional

standards and an update of programs for improving the qualifications of teachers of special educational institutions and directors of special educational institutions, changes in educational programs of various levels.

CONCLUSIONS

Our research shows, that all teaching staff of educational institutions and their principals in the conditions of martial law begin to perform additional functions and new tasks due to the peculiarities of the martial law in education and new threats to children and include the participants in the educational process, requirements to ensure national security. It requires updating the list and expanding the content of the functions of educators under martial law. That is why these questions should be included in the professional standards of the principal and the teacher of the institution of general secondary education, in educational programs of various levels, which will be the prospects of our further research.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Conflict Sensitivity and Peacebuilding Programming Guide (UNICEF, November). (2016). <https://www.unicef.org/media/59156/file>
- Global Education Monitoring Report Team (GEM Report). (n.d.). *The hidden crisis: armed conflict and education*. <https://en.unesco.org/gem-report/report/2011/hidden-crisis-armed-conflict-and-education>
- Helping Hands at School and in the Community: Guidance for School-Based Psychosocial Programmes for Teachers, Parents and Children in Conflict and Postconflict Areas. (n.d.). <https://psychotraumanet.org/en/helping-hands-school->

and-community-guidance-school-based-psychosocial-programmes-teachers-parents .

Kryminalnyy kodeks Ukrayiny [Criminal Code of Ukraine]. (2001). <https://zakon.rada.gov.ua/laws/show/2341-14#Text> [in Ukrainian].

Levchenko, K.B., Panok, V.H., & Trubavina, I.M. (2015). *Sotsialno-pedahohichna ta psykholohichna dopomoha simyam z ditmy v periodviyskovoho konfliktu : navchalno-metodychnyy posibnyk* [Socio-pedagogical and psychological assistance to families with children during the military conflict: educational and methodological manual]. Kyiv: Ahenstvo «Ukrayina» [in Ukrainian].

Ministry of Education and Science of Ukraine. (2021). *Deklaratsiia pro bezpeky shkil* [Safe Schools Declaration]. <https://mon.gov.ua/ua/ministerstvo/diyalnist/mizhnarodna-dilnist/deklaraciya-pro-bezpeku-shkil> [in Ukrainian].

Prokopenko, I.F. (2020). *Theory and Practice of Future Teacher's Training for Work in New Ukrainian School: monograph*. Prague: OKTAN Print. [in Ukrainian].

Prykhodko, I., Matsehora, J., Lipatov, I., Tovma, I., & Kostikova I. (2019). Servicemen's Motivation in the National Guard of Ukraine: Transformation after the 'Revolution of Dignity'. *Journal of Slavic Military Studies*, 32(03), 347–366, <https://doi.org/10.1080/13518046.2019.1645930>

Prykhodko, I., Yurieva, N., Timchenko, O., Fomenko, K., Kernickyi, O., Tovma, M., & Kostikova, I. (2020). What Motivates Ukrainian Women to Choose a Military Service in Warfare?. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 11(3), 36-53. <https://doi.org/10.18662/brain/11.3/108>

The World Bank Group. (n.d.). *Education in Fragile, Conflict & Violence Contexts*. <https://www.worldbank.org/en/topic/education/brief/education-in-fragile-conflict-violence-contexts>

Trubavina, I., Karaman, O., Kamenova, D., Stepanenko, V., & Yurkiv, Ya. (2021). A research on transformation of social wellbeing and life attitudes in students from the occupied territories and the demarcation line at relocated higher education institutions from the east of Ukraine. *SHS WebConf. Second International Conference on History, Theory and Methodology of Learning (ICHTML)*, 104, 1-12. <https://doi.org/10.1051/shsconf/202110403010>

Trubavina, I.M. & Zolotukhina, S.T. (2019). *Theory and practice of introduction of competence approach to higher education in Ukraine*. Vienna: Premier Publishing.

UNICEF. Regional Office for Central and Eastern Europe, Commonwealth of Independent States and Baltic States. (2007). *Education for some more than others? : a regional study on education in Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS)*. Geneva : UNICEF Regional Office for CEE/CIS. <https://digitallibrary.un.org/record/611084?ln> .

Zakon Ukrayiny «Pro oboronu Ukrayiny» vid 06.12.1991 № 1932-XII [Law of Ukraine “On the Defense of Ukraine” dated 06.12.1991 No. 1932-XII]. (1991). [in Ukrainian]. <https://zakon.rada.gov.ua/laws/show/1932-12#Text>

Zakon Ukrainy «Pro osvitu» [Law of Ukraine “On Education”]. (2017). [in Ukrainian].
<https://zakon.rada.gov.ua/laws/show/2145-19#Text>

Zakon Ukrainy «Pro pravovyy rezhym voyennoho stanu» [The Law of Ukraine “On the Legal Regime of Wartime”]. (2015). [in Ukrainian].
<https://zakon.rada.gov.ua/laws/show/389-19#Text>

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

ОБҐРУНТУВАННЯ НОВИХ ПРОФЕСІЙНИХ ФУНКЦІЙ ОСВІТЯН В УМОВАХ ВОЄННОГО СТАНУ

Стаття присвячена актуальній проблемі педагогічної теорії сьогодення – новим функціям освітян в умовах воєнного стану. Автори на основі огляду закордонних і вітчизняних джерел, узагальнення досвіду в Україні і поза її межами досягають мети. **Мета** – визначити нові функції освітян в умовах воєнного стану і наповнити існуючі новим змістом. В основі дослідження лежать компетентнісний, діяльнісний, середовищний, соціально-педагогічний, безпековий наукові підходи.

Методологія. Дослідження базується на компетентнісному, діяльнісному, екологічному, соціально-педагогічному, науково-охоронному підходах. Методами дослідження є: теоретичний аналіз джерел, узагальнення, спостереження, бесіди, встановлення причинно-наслідкових зв'язків. Матеріали дослідження: вітчизняні та зарубіжні розвідки з методики навчання, безпеки в освіті, особистий досвід викладання на програмах підвищення кваліфікації вчителів.

Результати. Спостерігаємо збільшення функцій освітян в умовах воєнного стану. До традиційних функцій директора школи логічно додати: безпекову функцію, організації соціальної підтримки і допомоги; соціальної адаптації; кадрового менеджменту і реалізації сталої кадрової політики в ЗЗСО; профілактичну функцію, функцію згуртування і єднання колективу школи і населення в громаді; національно-патріотичну; організаційну; фінансового менеджменту в ЗЗСО; інформаційну.

Вчителі в умовах воєнного стану також зазнали необхідності виконувати такі нові функції: соціально-педагогічну (допомога дітям у вирішенні проблем соціалізації в умовах воєнного стану, дистантності сімей); соціальної адаптації та інтеграції сімей з дітьми в умовах приймаючої громади; соціальної профілактики негативних явищ в освітньому середовищі; інформаційну щодо ресурсів для допомоги в громаді; соціальної підтримки і допомоги сім'ям із дітьми в умовах закладу освіти – тимчасового притулку для сімей; домедичної допомоги; сприяння національній безпеці через посилену увагу до національно-патріотичного виховання.

Висновки. Як свідчить наше дослідження, усі педагогічні працівники закладів освіти і їх керівники в умовах воєнного стану починають виконувати додаткові функції і нові завдання, що зумовлено особливостями воєнного стану в освіті і новими загрозами для дітей і всіх

інших учасників освітнього процесу, вимогами до забезпечення національної безпеки. Це потребує оновлення переліку і розширення змісту функцій освітян в умовах воєнного стану. Саме тому ці питання і повинні бути внесені в професійні стандарти керівника ЗЗСО і вчителя ЗЗСО, в освітні програми різного рівня, що і буде перспективами нашого подальшого дослідження.

КЛЮЧОВІ СЛОВА: воєнний стан, професійні стандарти, функції керівника закладу освіти, функції вчителя, безпека, право на освіту, національне виховання, національна безпека.

CITE THIS ARTICLE AS (APA style):

Trubavina, I., Cherednychenko, O., Oliinyk, N., & Nedria, K. (2022). Justification of the Educators' New Professional Functions under the Conditions of Martial Law. *Educational Challenges*, 27(2), 199-215. <https://doi.org/10.34142/2709-7986.2022.27.2.14>



<https://doi.org/10.34142/2709-7986.2022.27.2.15>

DEVELOPING RESEARCH COMPETENCE OF PRE-SERVICE EFL TEACHERS

Received: 31/07/2022

Accepted: 02/09/2022

Nataliia TUCHYNA¹, & Ihor KAMYNNIN²



¹ *Ph.D. in Education, Professor, Head of the Department of English Philology, H.S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.*

✉ **E-Mail:** ntuchka53@gmail.com

 <https://orcid.org/0000-0001-7860-0688>



² *Ph.D. in Philology, Associate Professor, Department of English Philology, H.S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.*

✉ **E-Mail:** igor_stone@ukr.net

 <https://orcid.org/0000-0002-8498-9578>

ABSTRACT

Action research has become an integral part of a teaching practitioner's professional activity improving the quality of teaching and contributing to innovations in the educational system. To be able to conduct action research efficiently, a graduate from a teacher training university should not only realize the significance of action research for their personal and professional development but also be equipped with the necessary methods and techniques and have an enquiry stance.

*The **purpose** of the article is to highlight the features of the process of developing students' research competence while their studying for a Bachelor's and Master's degree at the Department of Foreign Philology of H.S. Skovoroda Kharkiv National Pedagogical University. The described model appeared as a result of the implementation of the new national curriculum in methods of teaching English as a foreign language.*

© Nataliia TUCHYNA, & Ihor KAMYNNIN, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

The **methodology** of the study involves both a critical analysis of the models of action research currently employed in teacher education and empirical methods investigating our own daily activities as educators (observation and the participants' structured interviews). Structured interviews of 20 student teachers were taped, transcribed and analysed by the research educators engaged in the study.

Results. The authors described the principles and stages of developing students' research competence at the Department of Foreign Philology of H.S. Skovoroda Kharkiv National Pedagogical University. The results of the structured interviews prove the significant role of action research in teacher education. In the course of their training, the students gradually become aware of the challenges of action research, ways to overcome them and the relevance of it for teachers' professional and personal growth.

Conclusions. The suggested system of developing pre-service teachers' research competence proved its obvious benefits for educating reflective practitioners able to become agents of change.

KEYWORDS: Action Research, Enquiry Stance, Pre-Service Teacher Education, Pedagogical Reflection, Research Competence.

INTRODUCTION

Rapid changes in the economic and social development of modern society, globalization tendencies in all the spheres of human life, information boom and digitization of culture lead to new challenges in outlining the content and rethinking the organization of education. Certain innovations that emphasize competence approach, student-centeredness, learning through doing are being introduced into the modern system of higher education.

The competence approach to organizing the educational process and defining the essence of learning involves a shift from retranslating knowledge to converging the process of learning with scientific research. This results in the acquisition of practical social experience and mastery of general and professional competences needed for responding to future professional challenges.

The realization of student-centeredness turns the student into an active subject of educational activity, who is self-realized in

the process of acquiring knowledge and developing abilities and skills of its application, accumulating experience in formulating goals and choosing ways to achieve them using self-reflection and self-assessment.

The idea of "learning through doing" put forward by an American social philosopher J. Dewey (1933) envisages combining mental and practical activities for carrying out educational, research, creative and other types of activities, modeling one's own professional activities, going beyond traditional solutions, rejecting clichés and stereotypes.

Competency approach that prevails in the organization of modern system of higher education involves the formation of a range of general and professional competencies. For future foreign language teachers, these professional competences include psychological-pedagogical, linguistic, and professional-methodological ones.

Research competence is viewed as a general competence needed by

specialists of any profession. On the other hand, it can be considered a component of psychological-pedagogical, linguistic and professional-methodological competences, depending on which field of their professional activity a teacher explores.

The **purpose** of the article is to highlight the features of the process of developing students' research competence while studying for a Bachelor's and Master's degree at the Department of Foreign Philology of H.S. Skovoroda Kharkiv National Pedagogical University. The described model appeared as a result of the implementation of the new national curriculum in methods of teaching English as a foreign language (Typova..., 2020).

Interpreted generally, the term research competence denotes the following abilities of a teacher a) the ability to adopt a stance of enquiry and to organize one's work according to it; b) the ability to search for information and apply the results of available research in one's teaching practice; c) the ability to independently plan and carry out practical research (Andriessen, 2014).

The **methodology** of the study involves both a critical analysis of the models of action research currently employed in teacher education and empirical methods investigating our own daily activities as educators (observation and the participants' structured interviews). Structured interviews of 20 student teachers were taped, transcribed and analysed by the research educators engaged in the study.

CONTEXT OF THE STUDY

This study was conducted in the context of the Bachelor's degree programme for teacher education, namely the one designed by the Faculty of Foreign

Philology at H.S. Skovoroda Kharkiv National Pedagogical University. According to it, action research constitutes a separate module in the course of Methodology.

Student teachers start their research at the beginning of the seventh term of their training programme when they have a series of sessions and work out their research plans. Student teachers are free to choose a topic related to the challenges in their own school practice.

After that, during their teaching practice at school, they have a possibility to verify their hypothesis and find answers to their research questions. Supervision of student teacher research takes place mostly at the university. Discussion and interpretation of findings take place in the seminars during the eighth term, at the end of which the students make public presentations of the results of their research.

THEORETICAL FRAMEWORK

Research competence is viewed as one of the key competencies of the 21st century. In the modern world, research competence becomes one of the integral features of a successful personality, who adapts to rapid changes, continuously self-develops, and finds adequate responses to the challenges of the post-information society.

It is worth mentioning that research competence should be inherent not only to the scholars who are directly involved in research activities, but also to all practitioners who daily analyze real-life situations of the educational process and address various issues that arise.

Most educationalists interpret research competence as an amount of knowledge, acquired as a result of cognitive activity, a range of methods and techniques to carry it out, and certain value orientations,

motivation and an enquiry stance (Oolbekkink-Marchand et al, 2022).

Describing the essence and content of research competence, M.S. Holovan and V.V. Yatsenko (2012) single out the following structural components of it:

- 1)** a motivational-axiological component, which includes a system of professionally relevant motives for conducting research activity and conscious appreciation of it;
- 2)** a cognitive component, presented by a system of scientific knowledge of professional and interdisciplinary character and cognitive enquiry skills;
- 3)** a practical component that embraces a set of adopted research methods and techniques and skills of their implementation in teaching;
- 4)** an evaluation and reflection component, which is based on systematic evaluation of one's own achievements, their comparison with the goals to be achieved, and the desire for self-improvement (Holovan, & Yatsenko, 2012).

Nowadays action research has become a structural part of teacher education curriculum in many countries (Vaughan, & Burnaford, 2016). Addressing the challenges of the modern system of pre-service teacher education many scholars view action research as a means to bridge the existing gap between theoretical knowledge and practice (Burns, 2009; Kemmis, 2009; Bissonnette, & Caprino, 2014).

On the one hand, students are not always aware of the theoretical basis of each educational activity and experience difficulties in linking teaching practices to the corresponding theories (Ax, Ponte, and Brouwer, 2008). On the other hand, thanks to action research student teachers are involved in creating new knowledge, rather than transmitting what they

already know (Kirkwood, & Christie, 2006; Leung, 2009).

Educationalists believe that action research enhances both teacher research literacy and the reflective and analytical capabilities of pre-service teachers (Lattimer, 2012). Cochran-Smith et al. (2009) claim that by doing action research, teacher candidates become life-long learners who ask research questions and continuously reflect on their teaching practices.

Along with professional development, Oolbekkink-Marchand, van der Steen, and Nijveldt (2014) distinguish two more goals of action research: school development resulting in improved classroom practice of the teacher researchers themselves and the whole school community, and constructed new knowledge that can be shared with others and employed in different contexts. Thus, by conducting action research teachers manifest themselves as agents of change (Ulvik, & Riese, 2016).

Summarizing the views of researchers and our own experience of developing students' research competence, we can single out the following basic principles of organizing this process: step-by-step progression; continuous development; cyclic character; pedagogical and psychological support; care for students' interests and inclinations; students' free choice of research topics; compliance with research requirements; compulsory fulfillment of the assumed responsibilities; correlation with the departments' research topics.

Let us consider these principles in more detail.

The principle of step-by-step progression means that the process of acquiring knowledge and practical skills of research activity begins at school and continues in

a higher education institution. It also involves transition from less complex to more complex types of work, from basic to more sophisticated methods and techniques, from group projects to individual research, from information search to independent formulation of a hypothesis and its experimental verification.

The principle of continuous development is revealed in widening the scope and increasing the complexity of research work that starts with summarizing focused observations during school practice and noticing a bottleneck of teaching; continues with making presentations at seminars and conferences, working at bachelor's qualification paper and culminates in a master's research.

Cyclic character is manifested in the fact that a student-researcher, gradually advancing in exploring a topic, goes through several stages that correlate with certain scientific stages of a research cycle (establishing the starting point, designing an intervention and its implementation, data collection and analysis, reflection, evaluation and review of the problem in relation to data) and are periodically repeated at each subsequent level.

Cyclic character is associated with the principles of step-by-step progression and continuous development and, together with them, reflects the dynamics of the process of student research competence formation.

Throughout the entire period of study at a higher education institution, pedagogical and psychological support is provided by academic supervisors, teachers of methodology and of other professionally oriented disciplines, practice supervisors, and school mentors.

This support is necessary for enabling a student to outline the topic of the research, to go through its individual stages (a systematic search for information resources, selection of methods and research tools, data collection and their interpretation, interpretation and dissemination of the results).

It is important that such support is not coercive and is based on partnership relations with students. This support becomes even more significant during teaching practice as it facilitates student teachers' practical experience acquisition, expanding their professional knowledge and developing their teaching skills and abilities (Nebytova, 2022).

Caring for students' interests and inclinations and ensuring the student's free choice of research topics reflect the idea of student-centeredness and make another basis for creating each student's individual educational trajectory. On the other hand, students' autonomy envisages responsibility for their own research work, compulsory fulfillment of the obligations assumed, compliance with the requirements for the research and the deadlines for its implementation.

RESULTS

Analyzing our experience of organizing action research of pre-service teachers at our university we think it relevant to distinguish the following stages of developing students' research competence:

- 1) preparatory stage, during which students accumulate information about the main research areas related to their future profession, prepare essays, presentations, do group projects while studying the subjects on the 1st year curriculum;

2) information search stage, during which teaching practice begins in the form of focused observation of certain aspects of a teacher and students' activities in the classroom. By this time, the students are already engaged in the initial modules of Methodology course, where they get basic knowledge through reflecting on their learning experience, making guided discovery, and participating in experiential activities (learning through doing).

All this enables them to identify the problem areas in the organization and implementation of the educational process, write reflective essays and perform problem-solving tasks;

3) orientation stage, which involves familiarization with other educators' experience of conducting research (using case-study method), with the requirements for student research, main stages of the research cycle, ways of formulating hypotheses and phrasing research questions, methods of data collection and their interpretation.

This stage starts in the third year of studies and goes on up to the beginning of the fourth year when the students, in the course of a separate module of Methodology curriculum, design a detailed plan for their own action research. These plans are peer reviewed and then discussed with their supervisors;

4) executive stage, which includes direct implementation of the research plan during school practice, development of research tools and other materials and carrying out an intervention (a methodological experiment);

5) analytical stage during which the students perform qualitative and quantitative analysis of the collected data,

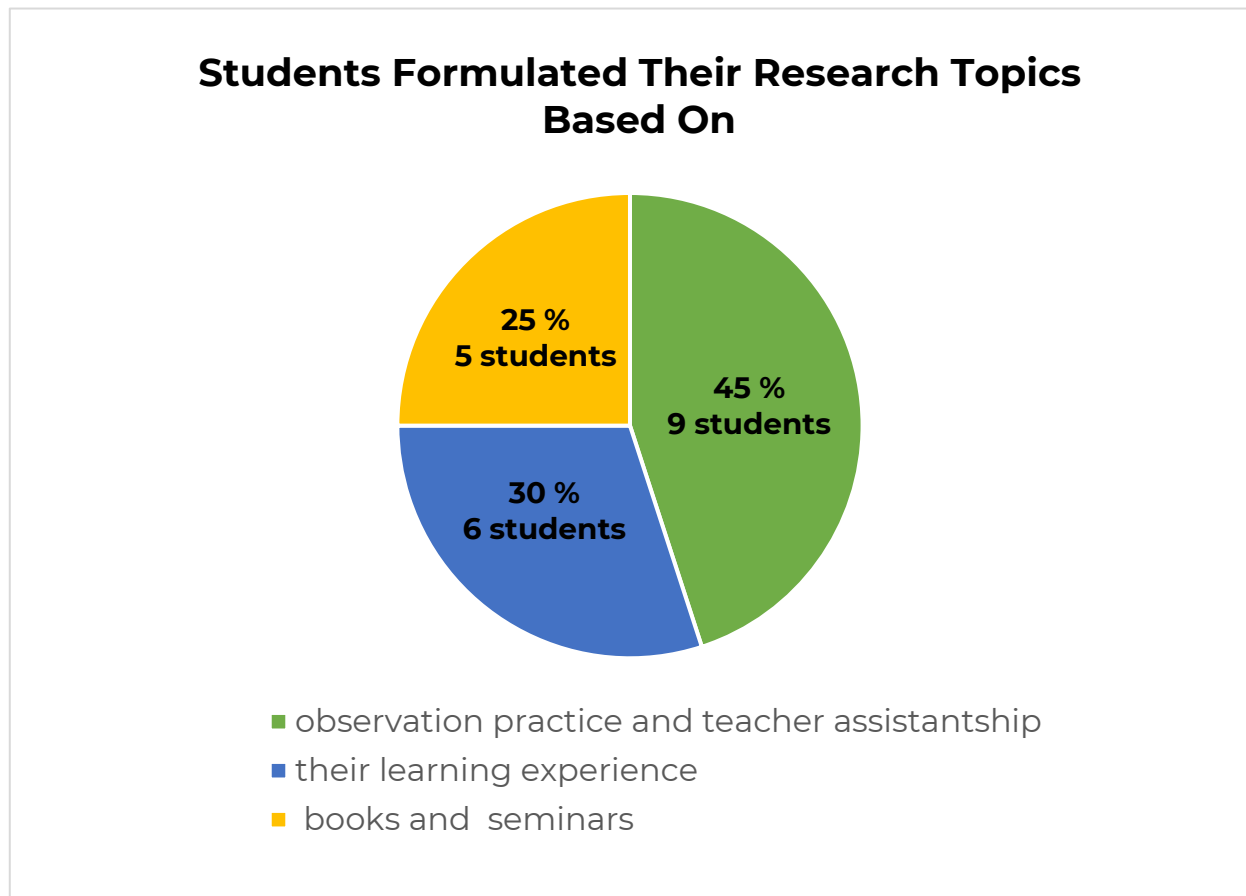
come up with answers to problematic questions, and summarise their findings in a qualification paper. This stage also includes dissemination of research results through presentations at seminars, meetings of special interest groups, student conferences;

6) generalizing stage that starts in the first year of a master's programme. At this stage student's research activity acquires a qualitatively new level, the subject of research expands, investigation becomes more profound, new experiments are conducted, and the results are reflected in scientific publications (articles and theses) as well as in a master's graduation paper.

To find out what kind of challenges the students face while doing action research and the level of future teachers' awareness of the significance of action research for their personal and professional growth, the authors conducted structured interviews with twenty fourth-year students studying for a Bachelor's degree in teaching English as a foreign language. The results of these interviews can be interpreted as follows.

The first question of the interview was *How did you come up with the issue for the research? Why do you want to study this topic?* (Fig. 1).

The reason for choosing the research topic for 30% of the students (6 students) was rooted in their learning experience at school and university, e.g. "I want to study this issue because learning English was focused only on grammar in my school, which caused me to have problems with pronunciation and speaking. I would like to make sure that my students do not have such problems".

Figure 1*Students' motives for formulating their research topics*

The reason for choosing the research topic for 30% of the students (6 students) was rooted in their learning experience at school and university, e.g. "I want to study this issue because learning English was focused only on grammar in my school, which caused me to have problems with pronunciation and speaking. I would like to make sure that my students do not have such problems".

25% (5 students) answered that reading about the topical issues in the books on methodology and having discussions in the seminars prompted their choice of the research topic, e.g. "The topic had been chosen because of its relevance. There is a problem of teacher talking time prevailing over student talking time. This issue reduces learners' opportunities to acquire speaking skills. Moreover, the present

situation leads to boredom, distraction and losing concentration".

The second question was *How easy was it to ask SMART research questions? Why? What challenges did you meet while planning your research?*

All the students agreed that asking research questions was one of the most challenging points. However, the use of Think – Pair – Share model in the seminars and the sample analysis of the research questions formulated by researchers helped them to rephrase their initial versions and make them more SMART. Some students emphasized the significance of wording their SMART research questions since the quality of their research largely depended on that.

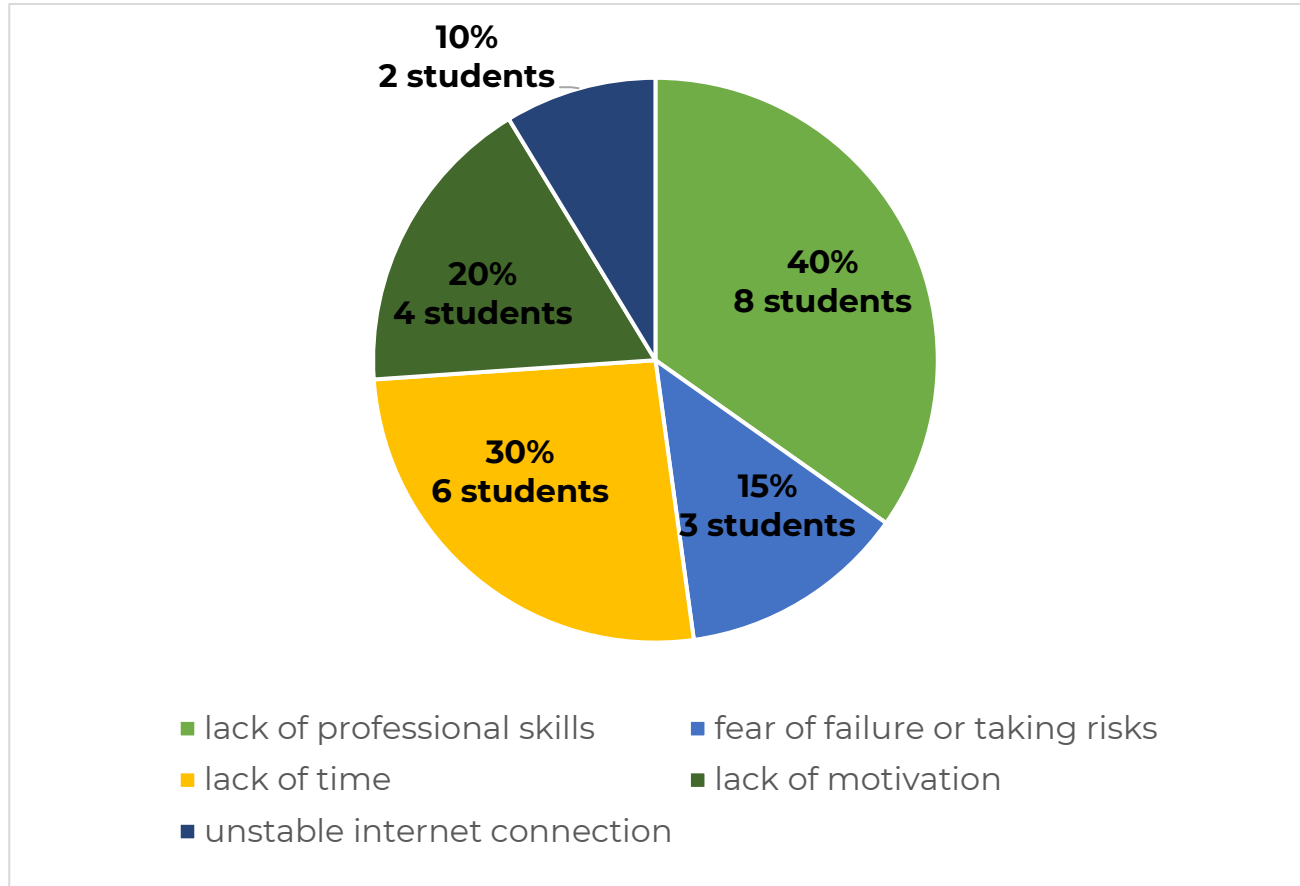
Answering the third question *What challenges did you meet while*

implementing your research plan? How confident were you?, many students

named more than one reason, so the total does not equal 100 %. (Fig.2)

Figure 2

The challenges students met while implementing their research plan



40% (8 students) mentioned the lack of various professional skills: poor time management, inability to effectively organize group work, little experience in classroom management etc. Personal qualities, e.g. being an introvert, having fear of failure or taking risks were mentioned by 15% (3 students). 30% (6 students) answered that extra time was needed to introduce new types of activities since schoolchildren had not done them before. 20% (4 students) commented on the lack of children’s motivation to participate in the experimental research. 10 % (2 students) referred to unstable internet connection at their school.

Most students felt not very secure at first but their confidence increased in the course of the experiment. As one student said, “Observation practice and teacher assistantship prepared us to assume the role of a teacher: we already knew our students, their preferences and learning styles, usual classroom procedures and their effectiveness”. Some students also mentioned that their confidence rose due to the school mentors and university supervisors’ adequate support.

In their answers to the fourth question *What challenges did you meet while analyzing and interpreting the data?*, most students agreed that they

experienced difficulties in selecting the most relevant research tools and in designing questionnaires and observation sheets, conducting interviews etc.

For some students the process of data collection turned out more time-consuming than they had expected. Some had to change the initial version of the designed questionnaire and had to design a new one to obtain more reliable data.

Asking the fifth question *Did conducting action research change any of your views and personal qualities? In what way?*, the authors wanted to find out if doing action research influenced the students' personalities.

All the students answered this question affirmatively saying that action research contributed to their flexibility of thought, helped to avoid standardized thinking and developed both their in-action and on-action reflective abilities.

Students got reassured that classroom practice can offer a lot of research questions which do not always have one and the only correct solution. Collaboration with school mentors, university supervisors and peers makes action research more successful.

Summarizing all the answers, we can conclude that, on the whole, the students demonstrated positive attitude to doing action research and realized its relevance for their personal and professional development.

DISCUSSION

Formation of research competence is a long process which largely depends on creating a favourable pedagogical environment in an educational institution, joint efforts of the dean's office, teaching staff of the departments, and student scientific society. Acquisition of knowledge and practical research skills

begins at school while participating in project work and coping with other information search tasks. This process continues in a higher education institution in the form of classroom research, focused observation, conference reports, and course and graduation papers. Action research becomes an integral component of professional growth of a practicing teacher.

The process of developing students' research competence will be more successful if it correlates with the research experience of the teaching staff and the areas and topics of their current research. Thus, a new model of partnership between teachers and students is born.

CONCLUSIONS

The authors are well aware of the fact that action research has become an essential part of teacher education curricula in many countries. In Ukraine, the significance of action research in educational practice is widely acknowledged nowadays. Though its theoretical foundations, principles and structural components are well described, there are few publications that analyse the practical implementation of them in a specific educational context. Our University was among the first educational institutions in Ukraine that introduced action research as a compulsory part of Bachelor's and Master's programmes of pre-service English teacher education. We believe that the analysis of our experience is worth studying and sharing and we would like to make it publicly available for fellow professionals to review, learn from and build on.

The described stages correlate with how the process of professional and methodological training of future EFL teachers is organized according to the new Methodology of Teaching English

curriculum developed as part of the international project "New Generation School Teacher" of the Ministry of Education and Science of Ukraine and the British Council in Ukraine. The suggested system of developing research competence of higher education graduates does not claim to solve all the problems in the organization of future EFL teachers' education. However, in our opinion, its benefits are obvious.

Firstly, training organized in this way promotes the development of reflection, which is a necessary tool for the formation of professional autonomy. Secondly, the acquired research skills, the ability to appropriately use various methods and tools, and the accumulated practical experience will be useful in our students' future professional activity. The graduates demonstrate greater confidence and can justify what and how they teach and why. Thirdly, the developed research competence transforms a teacher from a passive observer into an agent of change who does not only copy traditional methods, but is constantly searching for

better ways of teaching, initiating and introducing new technologies and techniques. Fourthly, as a result of their conscious enquiry stance, teachers actively participate in the dissemination of their own teaching experience and learn the experience of others at seminars, conferences, professional associations meetings and through publications in professional periodicals.

Thus, the suggested system of developing pre-service teachers' research competence is a sufficiently reliable tool for ensuring constant personal and professional growth and contributing to improving the level of teaching English throughout the country.

We firmly believe that one of the main tasks of higher education institutions is training of teachers who can systematically reflect and critically analyze the educational process and their own activities in it, make objective self-evaluation and apply effective methods to research various aspects of educational activity.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Andriessen, D. (2014). *Praktisch Relevant én Methodisch Grondig? Dimensies van onderzoek in het HBO* [Practically Relevant and Methodically Thorough? Dimensions of research in higher professional education]. Utrecht: Hogeschool van Utrecht.
- Ax, J., Ponte, P., & Brouwer, N. (2008). Action Research in Initial Teacher Education: An Explorative Study. *Educational Action Research*, 16(1), 55–72. <https://doi.org/10.1080/09650790701833105>

- Bissonnette, J.D., & Caprino, K. (2014). A Call to Action Research: Action Research as an Effective Professional Development Model. *Mid-Atlantic Education Review*, 2(1), 11-22.
- Burns, A. (2009). *Doing Action Research in English Language Teaching: A Guide for Practitioners*. Routledge.
- Cochran-Smith, M., Barnatt, J., Friedman, A., & Pine, G. (2009). Inquiry on Inquiry: Practitioner Research and Student Learning. *Action in Teacher Education*, 31(2), 17-32. <https://doi.org/10.1080/01626620.2009.10463515>
- Dewey, J. (1933). *How we think*. Buffalo, NY: Prometheus Books.
- Holovan, M.S., & Yatsenko, V.V. (2012) Sutnis't ta zmist ponyattia "doslidnytska kompetentnist" [The Essence and the Content of the Notion "Research Competence"]. *Teoriia ta metodyka navchannia fundamentalnykh dystsyplin u vyshchii shkoli: zbirnyk naukovykh prats, VII*, 55-62. [in Ukrainian]
- Kemmis, S. (2009). Action research as a practice-based practice. *Educational Action Research*, 17(3), 463-474. <https://doi.org/10.1080/09650790903093284>
- Kirkwood, M., & Christie, D. (2006). The role of teacher research in continuing professional development. *British Journal of Educational Studies*, 54, 429-448. <https://doi.org/10.1111/j.1467-8527.2006.00355.x>
- Lattimer, H. (2012). Action Research in Pre-Service Teacher Education: Is There Value-Added? *Inquiry in Education*, 3(1), 1-25. <http://digitalcommons.nl.edu/ie/vol3/iss1/5>
- Leung, C. (2009). Second language teacher professionalism. In A. Burns & J. C. Richards (Eds.), *The Cambridge guide to second language teacher education* (pp. 49-58). New York: Cambridge University Press.
- Nebytova, I. (2022). Scientific and Pedagogical Support for Future Primary School Teachers during Teaching Practice. *Educational Challenges*, 27(1), 80-91. <https://doi.org/10.34142/2709-7986.2022.27.1.07>
- Oolbekkink-Marchand, H.W., Oosterheert, I., Lubberink, L.S., & Denessen, E. (2022). The Position of Student Teacher Practitioner Research in Teacher Education: Teacher Educators' Perspectives. *Educational Action Research*, 30(3), 445-461. <https://doi.org/10.1080/09650792.2020.1857811>
- Oolbekkink-Marchand, H.W., van der Steen, J., & Nijveldt, M. (2014). A Study of the Quality of Practitioner Research in Secondary Education: Impact on Teacher and School Development. *Educational Action Research*, 22(1), 122-139. <https://doi.org/10.1080/09650792.2013.854175>
- Typova Prohrama "Metodyka navchannia angliiskoyi movy". Osvitnii stupin bakalavra [Core Curriculum "English Language Teaching Methodology". Bachelor's Level] (2020). Ivano-Frankivsk: NAIP. [in Ukrainian]
- Ulvik, M., & Riese, H. (2016). Action Research in Pre-service Teacher Education – A Never-ending Story Promoting Professional Development. *Professional Development in Education*, 42(3), 441-457. <https://doi.org/10.1080/19415257.2014.1003089>
- Vaughan, M., & Burnaford, G. (2016). Action Research in Graduate Teacher Education: A Review of the Literature 2000-2015. *Educational Action Research*, 24(2), 280-299. <https://doi.org/10.1080/09650792.2015.1062408>

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

**ФОРМУВАННЯ ДОСЛІДНИЦЬКОЇ КОМПЕТЕНТНОСТІ МАЙБУТНІХ
УЧИТЕЛІВ АНГЛІЙСЬКОЇ МОВИ**

Дослідження власної педагогічної діяльності, яке стало невід'ємною частиною професійної кар'єри педагога-практика, покращує якість викладання та сприяє інноваціям у системі освіти. Щоб мати можливість ефективно проводити такі дослідження, випускник педагогічного університету повинен не лише усвідомлювати їх значення для свого особистого та професійного розвитку, але також володіти необхідними методами та прийомами і мати власну дослідницьку позицію.

Мета статті – висвітлити особливості процесу формування науково-дослідницької компетентності студентів під час здобування ступенів бакалавра та магістра на факультеті іноземної філології Харківського національного педагогічного університету імені Г.С. Сковороди. Описана модель з'явилася в результаті впровадження нової типової програми з методики навчання англійської мови як іноземної.

Методологія дослідження передбачає як критичний аналіз моделей дослідження власної педагогічної діяльності, які зараз використовуються в підготовці вчителів, так і емпіричні методи дослідження повсякденної діяльності авторів як педагогів (спостереження та структуровані інтерв'ю учасників). Структуровані інтерв'ю з 20 майбутніми вчителями були записані, транскрибовані та проаналізовані педагогами-дослідниками.

Результати. Автори описали принципи та етапи формування дослідницької компетентності студентів на факультеті іноземної філології Харківського національного педагогічного університету імені Г.С. Сковороди. Результати структурованих інтерв'ю доводять значну роль дослідження власної педагогічної діяльності у підготовці вчителів. У ході навчання студенти поступово усвідомлюють виклики дослідження власної педагогічної діяльності, шляхи подолання труднощів та значущість проведення таких досліджень для професійного та особистісного зростання вчителів.

Висновки. Запропонована система розвитку дослідницької компетентності майбутніх вчителів довела свою очевидну користь для підготовки рефлексивних практиків, здатних стати агентами змін.

КЛЮЧОВІ СЛОВА: дослідження власної педагогічної діяльності, дослідницька позиція, підготовка майбутніх вчителів, педагогічна рефлексія, дослідницька компетентність.

CITE THIS ARTICLE AS (APA style):

Tuchyna, N., & Kamynin, I. (2022). Developing Research Competence of Pre-Service EFL Teachers. *Educational Challenges*, 27(2), 216-227. <https://doi.org/10.34142/2709-7986.2022.27.2.15>



<https://doi.org/10.34142/2709-7986.2022.27.2.16>

ENSURING PSYCHOLOGICAL SAFETY TO DEVELOP STUDENTS' RISK-BASED THINKING OF THE SPECIALTY "CIVIL SECURITY"

Received: 21/08/2022

Accepted: 21/09/2022

**Nataliia YEVTUSHENKO¹, Natalia TVERDOKHLIEBOVA², &
Iryna MEZENTSEVA³**



¹ Ph.D. in Technical Sciences, Associate Professor, Department of Occupational and Environmental Safety, National Technical University "Kharkiv Polytechnic Institute", 2 Kirpicheva St., Kharkiv, Ukraine.

✉ E-Mail: natalya0899@ukr.net

ORCID <https://orcid.org/0000-0003-0217-3450>



² Ph.D., Associate Professor, Department of Occupational and Environmental Safety, National Technical University «Kharkiv Polytechnic Institute», 2 Kirpicheva St., Kharkiv, Ukraine.

✉ E-Mail: natatv@ukr.net

ORCID <https://orcid.org/0000-0003-3139-4308>



³ Ph.D. in Technical Sciences, Associate Professor, Department of Occupational and Environmental Safety, National Technical University "Kharkiv Polytechnic Institute", 2 Kirpicheva St., Kharkiv, Ukraine.

✉ E-Mail: mezencevair@gmail.com

ORCID <https://orcid.org/0000-0001-7695-7982>

ABSTRACT

Ukrainian society is exposed to external threats from the war with Russia, which negatively affects the plans, goals and quality of life, increases

© Nataliia YEVTUSHENKO, Natalia TVERDOKHLIEBOVA, & Iryna MEZENTSEVA, 2022

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>

psychological tension and leads to a deterioration in the mental and social health of the population. This also applies to participants in the educational environment.

The relevance of studying the state, experience, psychological and social capabilities of modern students is growing during the conduct of hostilities in Ukraine. Hence, the issue of psychological safety in the interaction of participants in the educational environment in distance and mixed forms of education becomes a priority.

The process of forming risk-oriented thinking of students of a technical educational institution provides for training in understanding the phenomenon of risk-based thinking in the unity of three incarnations: a person himself determines what is acceptable for him, taking into account possible negative consequences, the presence of moral attitudes to preserve the life and health of people of social values of development social relations that exclude danger.

*The **purpose** of this article is to study the features of ensuring psychological security in conditions of uncertainty during the war in order to form risk-oriented thinking of students of higher educational institutions of a technical profile.*

*The **methodology** on which this article relies includes empirical methods (observation, conversation, dialogue) that are used in full-time and distance learning, and theoretical methods (analysis, synthesis, generalization, explanation, classification). Based on them, we formulate practical recommendations for providing psychological safety measures for the effective formation of risk-oriented thinking of students in modern learning conditions.*

*Within the framework of our study, the following **results** were achieved: the stages of educational and educational work in the educational process, pedagogical techniques through which the formation of risk-oriented thinking among students takes place; the conditions under which the psychological security of the student's personality will be ensured are formulated, the indicators of the success of the strategies for the psychological security of students of higher educational institutions in war conditions are identified.*

The article presents the concept of risk-based thinking of students, which provides for the ability to prevent actions to eliminate potential inconsistencies in technosphere safety, analyze all identified inconsistencies, and also take actions to prevent the recurrence of risk.

*The **conclusions** allow us to state that for the development of risk-oriented thinking, personal potential and abilities, it is important for a person to be in a safe and stable environment. A safe environment around the personality is the most important condition for its development. The Institute of Education is a psychological and pedagogical environment where specially organized conditions are developed for the development of a personality, included in the spatial, subject and social environment, the essence of which is a set of*

communicative actions and relationships between participants in the educational process.

KEYWORDS: *Educational Environment, Educational Process, Psychological and Pedagogical Support, Risk, Safety, Stress.*

INTRODUCTION

At the present stage of development of Ukrainian society, much attention has been paid to such a concept as security. With the outbreak of hostilities on the territory of Ukraine on the part of the Russian Federation, a situation has developed in almost all regions of the country, which is characterized as very difficult. Unfortunately, many institutions of higher education in the east of Ukraine are partially or completely destroyed and do not have the opportunity to continue the educational process.

Many students were forced to leave their homes and educational institutions and continue to receive qualifications abroad, or ended up in occupied territory and under shelling. But, despite the difficult conditions that have developed, the educational process in higher educational institutions has been restored and takes place in a distance or mixed form.

The department "Safety of labor and the environment" of the National Technical University "Kharkiv Polytechnic Institute" trains specialists in labor protection (bachelors and masters in specialty 263 "Civil security"). The theoretical and methodological strategy for the formation of risk-oriented thinking of students determines the pedagogical principles, which in their totality should ensure the solution of the following tasks:

- formation of students' needs for the safe implementation of professional activities;
- integration of knowledge about individual aspects of life safety into a

single interconnected (interdependent) complex;

- strengthening the practice-oriented orientation of skills and abilities to ensure life safety;
- strengthening the practice-oriented orientation of skills and abilities to ensure life safety.

Today, despite the hostilities, it is necessary in higher educational institutions to solve new and non-standard tasks that require special personal resources of students, due to the importance of developing productive strategies for ensuring psychological safety in the learning process, which are the basis of professional and personal self-realization to improve the quality of training.

It should be noted that among the requirements for a future specialist, the most important are professional and social competence, an active life position, communication skills, psycho-emotional stability, firmness of moral convictions.

The purpose of the article is to study the features of ensuring psychological security in conditions of uncertainty during the war for the formation of risk-based thinking of students of higher educational institutions of a technical profile.

THEORETICAL FRAMEWORK

Today, security in the educational system is of particular importance. The dynamic and ambiguous events taking place recently, rapid unpredictable changes in society, cause the emergence of many psychological problems and affect

primarily mental health, mental state and life satisfaction.

The term "psychological safety" is applicable to all areas of human life, so the educational environment is no exception (Blynova, Holovkova, & Sheviakov, 2018).

In general terms, the psychological security of a person is the state of its security, which ensures its integrity as an active social subject and the possibility of development in conditions of information interaction with the environment. One of the most important concepts in the context of the psychological security of the individual in war conditions is the concept of "psychological resources of the individual" (Lazorko, 2022).

Psychological resources are divided into four categories depending on the function they perform in interaction with adverse conditions of the surrounding reality:

1) stability resources that allow the subject to go through difficult situations, especially without changing his usual way of behavior. We can say that situations do not appear for the owner of such resources as difficult or problematic. These include: life satisfaction, optimism, greeting, etc.; operational or instrumental resources that allow you to respond to a situation according to a template at the operational level. These include, in particular, copings. "Coping strategies" measure habitual, self-produced, automatic, constructive and non-constructive ways of responding to difficult life situations. This concept describes all mental processes and mechanisms that are actualized by adverse external influences and are aimed at maintaining the integrity and stability of the subject, including in the educational environment.

2) self-regulation resources that allow the subject to modify and optimize his activity if it is difficult to maintain its initial

course. These include structures of personal potential: risk taking, autonomy, self-efficacy, action orientation, etc. The subject does not perceive the situation as problematic as long as the resources of stability available to him allow him to do this. When the challenge of a situation exceeds the ability to "not notice" it, operational resources are mobilized first of all, allowing you to respond to the situation automatically, without awareness and without significant changes in your goals, plans and course of your life. If this is not enough, self-regulation resources are turned on, requiring a conscious definition of the situation as problematic or critical and acceptance of its challenge;

3) if the resources of self-regulation are insufficient to overcome difficulties without trauma and deformation of the personality, it is necessary to turn the deformation into a transformation, change the personality, but not in the direction of the trauma vector, but in a different way, more controlled by the subject. This requires special resources of courage, tolerance for uncertainty, consciousness and reflection.

The educational environment is part of a person's living environment, so it also turned out to be not protected from the unfavorable trends of the modern life of Ukrainian society. Therefore, the problem of the psychological safety of the student's personality is especially relevant in our time.

METHODOLOGY

To achieve the goal, empirical methods (observation, conversation, dialogue), widely used in full-time and distance learning, and theoretical methods (analysis, synthesis, generalization, explanation, classification) were applied. Based on them, we conducted research to

determine our own attitude and position of students of the Department of Labor and Environmental Safety of the National Technical University "Kharkiv Polytechnic Institute" regarding the university environment, formulated practical recommendations for ensuring psychological safety measures for the effective formation of risk-oriented thinking of students in modern learning environments.

RESULTS

The formation of psychological safety strategies is an important condition for the professional and personal development of a student of a higher educational institution, which determines the choice of effective ways to prevent, reduce and overcome the consequences of the impact on the subject of negative external and internal factors of the educational environment.

Under the conditions of uncertainty during the war and the need to solve new and unexpected constantly emerging problems, an objective need arose to study the psychological and pedagogical conditions that contribute to the formation of productive strategies for self-sustaining the psychological safety of students. At the same time, the inability to show one's abilities and concern for one's future can become a serious obstacle to learning, self-realization and the development of a student's personality (Tverdohlebova, 2020). Also, the student's excessive focus on ensuring his psychological safety, motivation to avoid failures, increased anxiety can be a serious obstacle in the process of realizing his abilities (Popovych, & Blynova, 2019).

Risk-oriented thinking of students is the ability to analyze the causes of occurring phenomena and processes associated with risk, to identify patterns that

generate them, using the knowledge gained and the willingness to find solutions to overcome danger in non-standard situations when there are no ready-made means of safe action.

Responding to risks creates the basis for improving the effectiveness of the technosphere safety system, achieving better results and preventing the negative consequences of measures that exclude the recurrence of critical situations. Particular importance is attached to responsibility for the overall management of the risk assessment and management procedure in the structure of professional standards, training in risk analysis (identification, assessment and reduction), development of an action strategy in risk conditions.

Pedagogical principles that determine the theoretical and methodological strategy for the formation of students' risk-based thinking, in their totality, should provide a solution to the following tasks:

- formation of students' needs in the safe implementation of a professional type of activity.
- integration of knowledge about individual aspects of life safety into a single interconnected (interdependent) complex.
- strengthening the practice-oriented orientation of the skills and abilities to ensure the safety of the formed life activity.
- increasing the share of independence in the process of mastering knowledge, skills, skills of safe life activity in order to initiate risk-oriented thinking of students.

The life safety culture of a student based on a competency-based approach is an integrative characteristic of a specialist, including preparedness for the organization of prevention and prevention of dangerous situations in the

performance of official duties and in the ordinary life of a person and citizen.

Risk-oriented thinking of students in the specialization "Labor Protection" is a process of cognition by students of industrial and production processes, relations and their connections, solving safety problems, determining a possible risk, and foreseeing its consequences. This is the process of the work of consciousness, the processing of safety knowledge coming into new scientific and technical information and obtaining results: making managerial decisions to prevent negative consequences, developing new safe technologies.

The role of the educational function is to promote the active assimilation of the content of the educational program by students, the transformation of the acquired knowledge into skills and abilities, the formation of initial experience in solving professional problems (Prokhorov, Chernov, & Yusupov, 2015).

Students acquire the skills and abilities of mental activity: understanding the regulatory framework of Ukraine on labor protection, information materials of academic disciplines, highlighting the principles and patterns of labor protection management at work; analysis of production situations and synthesis of new solutions and methods of organization, abstraction and concretization of data, induction - deduction, classification, generalization, systematization of evidence; construction of a report, presentation, argumentation of the proposed solutions; formulation of conclusions about danger and safety, conditions for the conclusion about the content of risk, solving problematic tasks (Ovcharuk, 2017).

Risk-based thinking allows an organization to identify factors that may

cause its processes and quality management system to deviate from the planned results, to develop means and methods of prevention to minimize their negative impact, and to maximize the opportunities that arise.

Difficult living conditions in which the Ukrainians find themselves cause psychological and emotional tension. As a consequence, in one case this is accompanied by the mobilization of internal vital resources; in the other - a decrease or even a breakdown in working capacity, deterioration in health, physiological and psychological stressful phenomena.

In today's learning environment, it is difficult for students to focus on educational issues, most of them experience stress and fatigue. The main characteristics in violation of the psychological security of a person during the war include the following symptoms: constant expectation of failure, indifference (to work, household chores, appearance, to each other), fear of one's own insolvency, a feeling that no one can be trusted, and others that are very similar to stress symptoms. The consequences of stress can be impaired concentration, memory, logic and speed of thinking, critical perception of the situation and one's actions (Ming Li, Shixiong Chen, Zhen Gao, Wanqing Wu, & Lingzheng Xu, 2020). All this aggravates not only the state of health of the participants in the educational process, but also the psychological climate in the team.

The most important task of the teacher in organizing the educational process is to create an atmosphere of trust. This is a factor without which learning in crisis conditions cannot be successful (Aprieliava, Demchenko, Kovalevska, Kovalevska, & Hladun, 2021).

At the department "Safety of work and the environment" of the National Technical University "Kharkiv Polytechnic Institute" when teaching academic disciplines in the educational process, there are the following stages of educational work: motivational-adjusting, formative, activity, controlling. The pedagogical process of forming students' risk-oriented thinking includes content and procedural components. The content component is implemented through the study of content, interdisciplinary connections, analysis and observation of real situations of life and production that contain risk. The procedural component is implemented through the study of risk assessment and management procedures, identification and assessment of risks.

In the process of forming students' risk-based thinking, active and interactive teaching methods occupy a significant place, and their implementation requires the following techniques (Yevtushenko, & Tverdohliebova, 2022):

- modeling of situations related to life safety problems and moral and emotional attitude (to oneself, others, activities, the world) as part of the development of a general culture of the individual, reproduction of these situations (business games), as well as their further discussion with the participation of experienced consultants;
- implementation of cultural and moral education through the transfer of knowledge to students about the general categories of culture, about the content of humanistic values, the content of the culture of safe life;
- the use of psychological and pedagogical training to develop the skills of safe behavior of verbal and non-verbal communication, the ability to work in a team;

– internships under the guidance of experienced professionals, organization of informal communication with teachers and representatives of the chosen profession.

Getting an education, making plans for future professional and personal self-realization, student youth needs confidence in the future. If there is no such confidence, a certain disorientation appears, the motivation to achieve success and overcome obstacles decreases, and so on (Kolesnichenko, Hladun, Diahyleva, Hats, & Karnaukhova, 2020). However, not only the instability of the macrosociety affects the students' sense of security. There are many microsocial and personal factors that can block this feeling to varying degrees. We are talking about the features of interpersonal interaction (in institutions of higher education, family, leisure), about the socio-psychological climate of small groups in which a young person is included, as well as his individual psychological and socio-psychological characteristics, etc.

Therefore, we can conclude that the preservation of the psychological safety of the student's personality depends on a whole complex of macro- and microsocial factors. Among the latter, the institution of higher education is of paramount importance as the leading institution for the socialization of student youth. The educational and personality-developing functions of an institution of higher education aim not only to prepare a future specialist in a particular area of work, but also to contribute to the formation of his personality. A significant factor influencing the formation of a student's sense of security in a higher educational institution is personal communication, which acts as a means of forming a person's attitude both to other people and to himself.

Students in relation to the university environment can adhere to different positions (Stegniy, 2010):

1. Formal presence of the student at the university. Communication "student-university" is reduced to a minimum, its content is only in the educational process. There is an indifferent attitude to everything that happens at the university.
2. Consumer attitude of the student towards the university, where the educational institution is considered as a service provider.
3. Student interaction with the university environment: organizing and

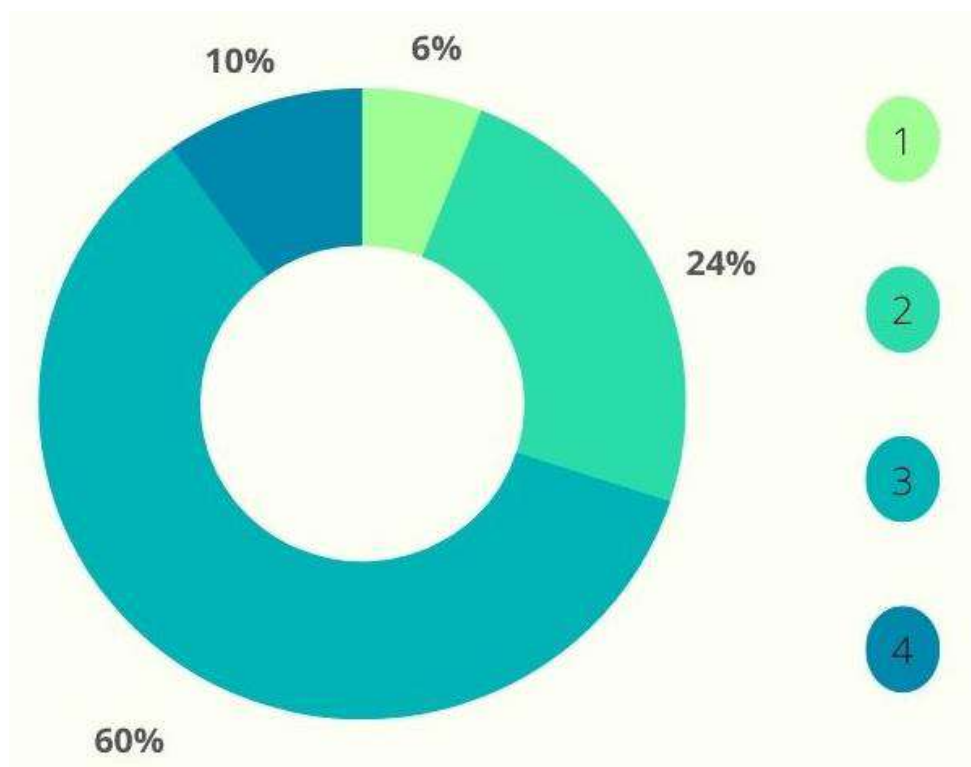
participating in events, supporting traditional activities and designing new means and methods of various activities.

4. The student considers himself as a subject of the development of the university environment, and the educational institution is a condition for personal and professional development.

We conducted a survey of 1st year students of the Department of Labor and Environmental Safety regarding their position in relation to the university environment. The survey results are shown in Figure 1.

Figure 1

Student's position in relation to the university environment



Note that the second, third, fourth positions reflect the most comfortable interaction of students with the university environment. Particularly positive and favorable is the fourth position, where the subject-subject nature of relations is seen,

which is the optimal level of socio-psychological interaction of students in the educational environment.

According to the results of our study, 60% of 1st year students are happy to take part

in organizing and conducting university events, support traditional activities and take part in the design of new means and methods of various educational activities.

So, in 2022, 1st year students of the Department of Labor and Environmental Safety of the National Technical University "Kharkiv Polytechnic Institute" took part in the II round of the International Competition of Student Scientific Works in the specialty 263 "Civil Security", which was held on the basis of the Kremenchug National University named after Mikhail Ostrogradsky and won prizes. They defended their works in English and, according to the jury, they were the best performers.

It should be noted that the psychological safety of the educational environment "student-teacher" is based on the quality of the interaction process (Kosholap, Maksymchuk, & Branitska, 2021):

- leads to the actualization of the personality of the teacher himself, the formation of his sense of professional competence and job satisfaction;
- contributes to the formation of a healthy, creative and socially adapted personality of the student, reduction of neuropsychic stress;
- increases the ability for self-regulation of both sides of the interaction process;
- contributes to the improvement of the mental health of the participants in the pedagogical process.

Let us formulate the conditions under which the psychological safety of the student's personality will be ensured (Shinkar, 2021):

1. The presence of psychologically favorable conditions for educational activities and the development of the student's personality.

2. Timely provision of unobtrusive psychological assistance to the first-year student in solving issues that arise in the process of work and interaction with peers and teachers.

3. Psychological provision of conditions for the formation and development of social responsibility, professional motivation and competence in the interests of future professional activity, the needs of the student's personality and the development of society.

4. Actualization of the individual forces of the personality and calm overcoming of problematic situations that arise during training.

5. The anonymity of the processes of resolving "stressful situations" that arise during training in higher education and living together in a hostel.

6. Creation of conditions for self-determination and self-realization of a young person's personality in conditions of higher education and creation of favorable conditions for self-improvement of one's own personal and professional potential.

Let us name the success indicators of the psychological safety strategies of university students in war conditions: subjective well-being, high adequate self-esteem, value self-attitude, positive thinking. These indicators are determined by the ability of the subject to control the situation, maintaining and developing those values that are highly significant for him both in the relevant period of time and in the future.

It should be noted that the basic characteristic of the integrity of the individual is psychological stability, which is the basis of the ability to self-regulate, organize activities in order to maintain psychological well-being and self-realization.

The synergistic effect in the formation of a psychologically and socially mature personality of a subject of professional self-determination in modern conditions is achieved through the ability to concentrate on events in the present, that is, to be in a situation of "here and now", to be open to the experience of cognition and self-knowledge, implementing reflective skills, having an internal focus control, the prevailing motivation for personal growth, including due to an adequate current moment of the level of anxiety and the state of well-being (Alarcón Díaz, Alcas Zapata, Alarcón Díaz, Natividad Arroyo, & Rodríguez Fuentes, 2019).

The need for psychological security requires the implementation of special activities, within which it is necessary to conduct a detailed analysis of a particular situation, identify its inherent dangers and develop effective measures for the psychological protection of a person. The ability to timely identify signs of danger and the ability to choose ways to respond determine a person's attitude to danger. Researchers identify the most typical ways of responding to situations of danger (adequate reaction, exaggeration of danger and ignoring it).

Motivational factors that influence a person's attitude to danger are also taken into account (the level of severity of needs for danger and safety, willingness to take risks, the prevalence of motivation to achieve success or avoid failure). Adequate ways of responding in situations of danger are chosen by people who do not express the need to experience a sense of danger, and they react to danger in a balanced and rational way. It should be borne in mind that the most frequent, significant and dynamic are the rash, unconscious actions of a person as a result of his reaction to danger.

Psychological security characterizes the degree of protection of the individual from various negative and destructive factors of the outside world (Nerubasska, Palshkov, & Maksymchuk, 2020). The psychology of personal security determines the level of a comfortable mental state necessary for a person to perform professional and social functions without fear for his life and without fear of possible negative consequences of the development of the situation in which he is.

The ability of a person to withstand an emergency situation has three components:

- physiological stability, due to the state of the physical and physiological qualities of the body (constitutional features, type of nervous system);
- mental stability due to training and the general level of personality traits (special skills of action in an extreme situation, the presence of positive motivation, etc.);
- psychological readiness.

Psychological and pedagogical support in modern conditions of education should become one of the main conditions for the success of personality-oriented social and professional education of students in a higher educational institution. The activity of the subject himself in ensuring psychological safety is a key condition, and the personality must be considered as a subject of activity, capable of regulating the process of planning and implementing the goals of activity.

There is a need for a comprehensive program for the formation of strategies for the psychological safety of university students, aimed at assisting in the development of psychotechnics of development and self-development, the activation of the internal resources of the

individual, the development of reflection and subjectivity, which is a psychological condition for the successful professional and personal development of students.

DISCUSSION

We agree with the opinion of scientists S.V. Kononov, A.V. Zhukov (2020) that a comprehensive, full-fledged development of a person is possible only if the needs for security are met, when his internal resources are not turned into protection from potential or experienced threat, but on their own development.

The psychological safety of the individual is a significant factor in the successful self-realization and personalization of the individual. Realized through the subject's awareness of his ability to overcome adverse external and internal actions, it is one of the main prerequisites for the formation of risk-oriented thinking, the achievement of subjective well-being as the basis for sustainable personal and professional development.

To date, there is not a sufficient number of practical developments aimed at creating conditions for the formation of ways to ensure the psychological safety of the individual in the higher education system. Insufficient attention is paid to the formation of the qualities and properties of the personality that underlie the self-sufficiency of psychological security in war conditions. Accordingly, this study is devoted to the actual problem of the formation of psychological security strategies among students of higher educational institutions based on the development of reflection, their mastery of the subjective way of life and the creation of a temporal perspective.

CONCLUSIONS

The success of teachers' professional activities, the effectiveness of students'

educational activities depend on psychological safety in the educational environment, when a person feels safe and comfortable - she is emotionally stable, less prone to stress, interacts openly in a team and strives for self-realization. Therefore, it is important to maintain the state of psychological security not only of the participants in the educational process, but also of the individual in her daily life.

The psychological safety of the student's personality is a necessary condition for the development of functional capabilities, the prevention of psychosomatic disorders, and personal potential. It is in the educational environment of the WHE that conditions should be created that are aimed not only at the personal and professional development of students. The more and more fully a person uses the possibilities of the environment, the more successful his free and active self-development is felt.

The creation and use of strategies for the formation of risk-oriented thinking of students in the modern conditions of higher education leads to the strengthening of educational opportunities. The teacher can harmoniously build the pedagogical process, find a diagnostic target, forms and methods of training and education, diagnostic tools; reduce the role of the subjective factor (teacher's bias or inclination) in the course of control; pay more attention to the issues of education, individual and personal development of students. As a result, students know, are able and master the methods of planning and solving problems of their own professional and personal development in the field of labor protection. Competence is manifested in the ability to apply knowledge and skills to achieve safety, as well as to prevent risks.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Blynova, O.Y., Holovkova, L.S. & Sheviakov, O.V. (2018). Philosophical and sociocultural dimensions of personality psychological security. *Anthropological Measurements of Philosophical Research*, 14, 73-83. <https://doi.org/10.15802/ampr.v0i14.150750>
- Lazorko, O. (2022). Psychological Safety of the Individual in Normal and Extreme Conditions of Professional Activity: Neurophysiological Aspects. *Broad Research in Artificial Intelligence and Neuroscience*, 13(1), 324-346. <https://doi.org/10.18662/brain/13.1/287>
- Tverdohlebova, N.E. (2020). Professional self-realization of law enforcement officers at the stage of professional training. *Law and security*, 1(76), 162-167. <http://pb.univd.edu.ua/index.php/PB/article/view/303/262>
- Popovych, I. S. & Blynova, O. Ye. (2019). The Structure, Variables and Interdependence of the Factors of Mental States of Expectations in Students' Academic and Professional Activities. *The New Educational Review*, 55(1), 293-306. <http://dx.doi.org/10.15804/tner.2019.55.1.24>
- Prokhorov, A.O., Chernov, A.V. & Yusupov, M.G. (2015). Cognitive states in educational activity of students: Structural-functional aspect. *Asian Social Science*, 11(1), 213-218. <https://doi.org/10.5539/ass.v11n1p213>
- Yevtushenko, N.S. & Tverdohlebova, N.E. (2022). Use of pedagogical technologies for formation of risk-oriented thinking students of the specialty "Civil security". *Current issues in modern science*. 1(1). 371-378. http://repository.kpi.kharkov.ua/bitstream/KhPI-Press/57687/3/APSN_2022_1_levtushenko_Vykorystannia_pedahohichnykh.pdf
- Kolesnichenko, N.Yu., Hladun, T.S., Diahyleva, O.S., Hats, L.Y. & Karnaukhova, A.V. (2020). Increasing Students' Motivation to Learn at Tertiary Educational Institutions. *International Journal of Higher Education*, 9(7), 166-175 <https://doi.org/10.5430/ijhe.v9n7p166>
- Stegniy, V.N. & Kurbatova, L.N. (2010). Social security as a characteristic of students' social well-being. *Sotsiologiya obrazovaniya - Sociology of education*, 6, 55- 66 [in Ukrainian].
- Kosholap, A., Maksymchuk, B., Branitska, T., Martynets, L., Boichenko, A., Stoliarenko, O., Matsuk, L., Surovov, O., Stoliarenko, O., & Maksymchuk, I. (2021). Neuropsychological Bases of Self-Improvement of Own Physical Health of Future Teachers in the Course of University Education. *Broad Research in Artificial Intelligence and Neuroscience*, 12(3), 171-190. <https://doi.org/10.18662/brain/12.3/226>
- Shinkar, M.I. (2021). Psychological safety of the student's personality. *Scientific notes: Social Psychology; Psychology of Social Work*, 32(71), 75-80. http://www.psych.vernadskyjournals.in.ua/journal/1_2021/1_2021.pdf

- Alarcón Díaz, M. A., Alcas Zapata, N., Alarcón Diaz, H. H., Natividad Arroyo, J.A., & Rodríguez Fuentes, A. (2019). Empleo de las estrategias de aprendizaje en la universidad. Un estudio de caso. *Propósitos Y Representaciones*, 7(1), 10-32. <https://doi.org/10.20511/pyr2019.v7n1.265>
- Nerubasska, A., Palshkov, K., & Maksymchuk, B. (2020). A Systemic Philosophical Analysis of the Contemporary Society and the Human: New Potential. *Postmodern Openings*, 11(4), 275-292. <https://doi.org/10.18662/po/11.4/235>
- Ming Li, Shixiong Chen, Zhen Gao, Wanqing Wu, & Lingzheng Xu (2020) Physiological explicit of delayed psychological stress response induced by extra neural regulation. *Biomedicine*, 196, [105610]. <https://doi.org/10.1016/j.cmpb.2020.105610>
- Aprieliava, I.V., Demchenko, V.A., Kovalevska, A.V., Kovalevska, T.Y. & Hladun, T.S. (2021). Psychological Factors Influencing on the Motivation to Study of Students of TEI. *Propósitos y Representaciones*, 9(SPE2), e993. <http://dx.doi.org/10.20511/pyr2021.v9nSPE2.993>
- Kononov, S.V., & Zhukov, A.V. (2020). The philosophy of security in the globalizing culture system. *Journal of History Culture and Art Research*, 9(3), 415-422. <http://dx.doi.org/10.7596/taksad.v9i3.2848>

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

**ЗАБЕЗПЕЧЕННЯ ПСИХОЛОГІЧНОЇ БЕЗПЕКИ ДЛЯ ФОРМУВАННЯ
РИЗИКО-ОРІЄНТОВАНОГО МИСЛЕННЯ СТУДЕНТІВ СПЕЦІАЛЬНОСТІ
«ЦИВІЛЬНА БЕЗПЕКА»**

Українське суспільство зазнає зовнішніх загроз від війни з Росією, що негативно відбивається на планах, цілях і якості життя, підвищує психологічну напруженість і призводить до погіршення психічного та соціального здоров'я населення. Це стосується і учасників освітнього середовища,

Актуальність вивчення стану, переживання, психологічних та соціальних можливостей сучасного студентства зростає за умов ведення воєнних дій в Україні. Звідси першочерговим стає питання психологічної безпеки у взаємодії учасників освітнього середовища за дистанційною та змішаною формами навчання.

Педагогічний процес формування ризик-орієнтованого мислення студентів технічного навчального закладу передбачає навчання усвідомленню феномену ризик-орієнтованого мислення в єдності трьох втілень: людина сама визначає те, що для неї прийнято з урахуванням можливих негативних наслідків, наявність моральних установок на збереження життя та здоров'я людей та соціальних цінностей розвитку суспільних відносин виключають небезпеку.

Метою даної статті є дослідження особливостей забезпечення психологічної безпеки в умовах невизначеності під час війни для формування ризик-орієнтованого мислення студентів вищих навчальних закладів технічного профілю.

Методологія, на яку спирається ця стаття, включає емпіричні методи (спостереження, бесіда, діалог), які зараз використовуються в очній та

дистанційній формах навчання, та теоретичні (аналіз, синтез, узагальнення, пояснення, класифікація). Спираючись на них, ми формуємо практичні рекомендації щодо забезпечення заходів психологічної безпеки для ефективного формування ризик-орієнтованого мислення студентів в сучасних умовах навчання.

У рамках нашого дослідження було досягнуто наступних **результатів**: виділені етапи навчальної та виховної роботи в освітньому процесі, педагогічні прийоми, через які відбувається формування ризик-орієнтованого мислення у студентів; сформульовано умови, за яких буде забезпечена психологічна безпека особистості студента, виявлені показники успішності стратегій психологічної безпеки студентів вищих навчальних закладів в умовах війни.

Реагування на ризики створює основу для підвищення результативності системи техносферної безпеки, досягнення більш високих результатів та запобігання негативним наслідкам заходів, які б виключали повторення критичних ситуацій. Особливого значення надається відповідальності за загальне керівництво процедурою оцінки та управління ризиками у структурі професійних стандартів, навчанню аналізу ризиків (ідентифікація, оцінка та зниження), розробці стратегії дій в умовах ризику.

Висновки дозволяють стверджувати, що для розвитку ризик-орієнтованого мислення, особистісного потенціалу та здібностей людини важливо перебувати у безпечному та стабільному середовищі. Безпечна обстановка навколо особистості є найважливішою умовою її розвитку. Інститут освіти є психолого-педагогічним середовищем, де розбудовуються спеціально організовані умови для розвитку особи, включеної до просторово-предметного та соціального оточення, сутністю якої є сукупність комунікативних дій та взаємовідносин учасників навчально-виховного процесу.

КЛЮЧОВІ СЛОВА: освітнє середовище, освітній процес, психолого-педагогічний супровід, ризик, безпека, стрес.

CITE THIS ARTICLE AS (APA style):

Yevtushenko, N., Tverdokhliebova, N., & Mezentseva, I. (2022). Ensuring Psychological Safety to Develop Students' Risk-Based Thinking of the Specialty "Civil Security". *Educational Challenges*, 27(2), 228-241. <https://doi.org/10.34142/2709-7986.2022.27.2.16>



Scientific International Journal

EDUCATIONAL CHALLENGES

Volume 27, Issue 2, 2022

FOUNDER and PUBLISHER:

H. S. Skovoroda Kharkiv National Pedagogical University

JOURNAL LISTED/INDEXED BY:

Index Copernicus, ROAD, Open Ukrainian Citation Index (OUCI),
Google Scholar, Scilit.

EDITOR-IN-CHIEF:

Ilona KOSTIKOVA

DEPUTY EDITOR:

Emerson Abraham JACKSON

TECHNICAL EDITOR:

Victor CHETVERYK

PUBLISHER'S ADDRESS and EDITORIAL BOARD'S ADDRESS:

H.S. Skovoroda Kharkiv National Pedagogical University,
Alchevskyh str., 29, Kharkiv, 61002, Ukraine.

E-MAIL:

educationalchallengesjournal@gmail.com

OFFICIAL WEBSITE:

<http://educationalchallenges.org.ua/>

Харківський національний педагогічний університет
імені Г.С. Сковороди.

Україна, 61002, м. Харків, вул. Алчевських, 29.

